UniVerse Skillet™
GAS-FIRED FRYING AND BRAISING PAN

TECHNICAL MANUAL

MODELS:

30-STGL, 30-STGL-LX, 40-STGL, 40-STGL-LX,
30-STGM, 30-STGM-LX, 40-STGM, 40-STGM-LX

COVERING

- **Installation**
- **Operation**
- **Service and Parts**

WARNING

Improper Installation, adjustment, alteration, service, or maintenance can cause property damage, injury, or death. Read the installation, operating, and maintenance instructions thoroughly before installing or servicing this equipment.

FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

In a prominent location, post instructions to be followed in the event the user smells gas. This information shall be Obtained by consulting the local gas supplier.

MARKET FORCE
[INDUSTRIES INC

An Employee-Owned Company 35 Garvey Street • Everett, MA 02149-4422 USA Tel. (617) 387-4100
Fax (617) 387-4456 Fax Outside MA- 1-800-227-2659 E-Mail CUSTSERV@MFn COM Form No. S-2469

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SUMMARY OF SAFETY NOTICES

UniVerse Tilting Skillet ™

MODELS: 30-STGL, 30-STGL-LX, 40-STGL, 40-STGL-LX, Open-Leg Gas UniVerse Skillet
30-STGM, 30-STGM-LX, 40-STGM, 40-STGM-LX, Modular Gas UniVerse Skillet

The following general safety notices supplement the specific warnings and cautions contained in this technical manual. They are recommended precautions that must be understood and adhered to during the installation, operation, and maintenance of these electrically operated appliances.

WARNING

Do not get water on wiring in controls. Be sure to wash inside of skillet pan, inside of cover including under drip-lip, and pouring spout area.

CAUTION

Do not install in such a manner that the service person cannot remove the control box cover.

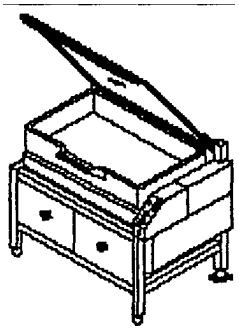
Supply wires must be suitable for temperature of at least 90°C. Additionally, all wiring must conform to the requirements of local and national electric codes. Conduit and fittings should be watertight type.

Unit is equipped with an interlock switch that shuts off gas to the burners when skillet pan is more than 10° above normal horizontal cooking position.

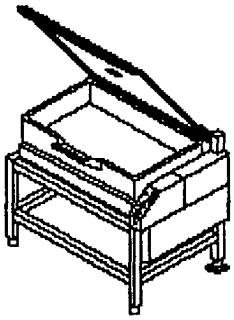
UniVerse Tilting Skillet™

MODELS: 30-STGL, 30-STGL-LX, 40-STGL, 40-STGL-LX, Open-Leg Gas UniVerse Skillet
30-STGM, 30-STGM-LX, 40-STGM, 40-STGM-LX, Modular Gas UniVerse Skillet

UNIVERSE TILTING SKILLET™



Models:
30-STGM -
40-STGM



Models:
30-STGL
40-STGL

AGA, CGA, and NSF listed
Manufacturer reserves the right to modify materials and specifications without notice

DESCRIPTION

The Market Forge Gas UniVerse Tilting Skillets™ are available in 30-gallon (87-liter) and 40-gallon (114-liter) pan bodies with 108,750 BTU and 145,000 BTU inputs, respectively. Both models are available in open-leg and closed-base frame assemblies with manual or power tilt capabilities.

Benefits: Our UniVerse Skillets, unlike those of other braising pan manufacturers that use clad plates, incorporate a uni-pan design. This design reduces the potential for leaks and eliminates the possibility of pitting and surface rust. The new center-of-gravity tilting allows for safe use of caster mounting. Our new power tilt operates smoothly, with manual override that works easily when needed, without the use of electric drills required by other manufacturers.

Construction: The UniVerse Skillet has a textured stainless steel cooking surface with reinforcement. Gas burners turn off automatically when the cooking pan is raised to a tilted position. The skillet is provided with a heavy-duty gas shock assisted cover with condensate vent. The cooking pan and cover are mounted to a l'/2" (38 mm) square stainless steel tube frame, permitting access to floor for easy cleaning. The closed-base model incorporates easily removable stainless steel panels on the front, and left sides. The cooking pan tilts to a full 93°. This is accomplished by a gear mechanism operated manually with a collapsible hand crank. Power tilting is also available. Both tilting methods allow complete emp tying of contents under positive control.

TECHNICAL SPECIFICATIONS

Cooking Pan: The unitized cooking pan has no bottom weld and is reinforced to resist cracking as expansion and contract tion occur. The textured cooking surface is machine-applied' for a long-wearing, good appearance. The cooking pan in corporates an easy-pour lip and 5-gallon increment markings
Gas flames are applied to finned aluminum extrusions bolted to the underside of the cooking pan for better heat transfer, An interlock switch is provided to cut gas to the burners when the pan is tilted more than 10° from the normal horizontal;
cooking position. The counterbalanced cover is pivoted from the frame using gas shocks to assist lifting and ease of use.. lift handle is provided along the front edge of the cover.. manually opened condensate vent is positioned in the cent* of the cover.

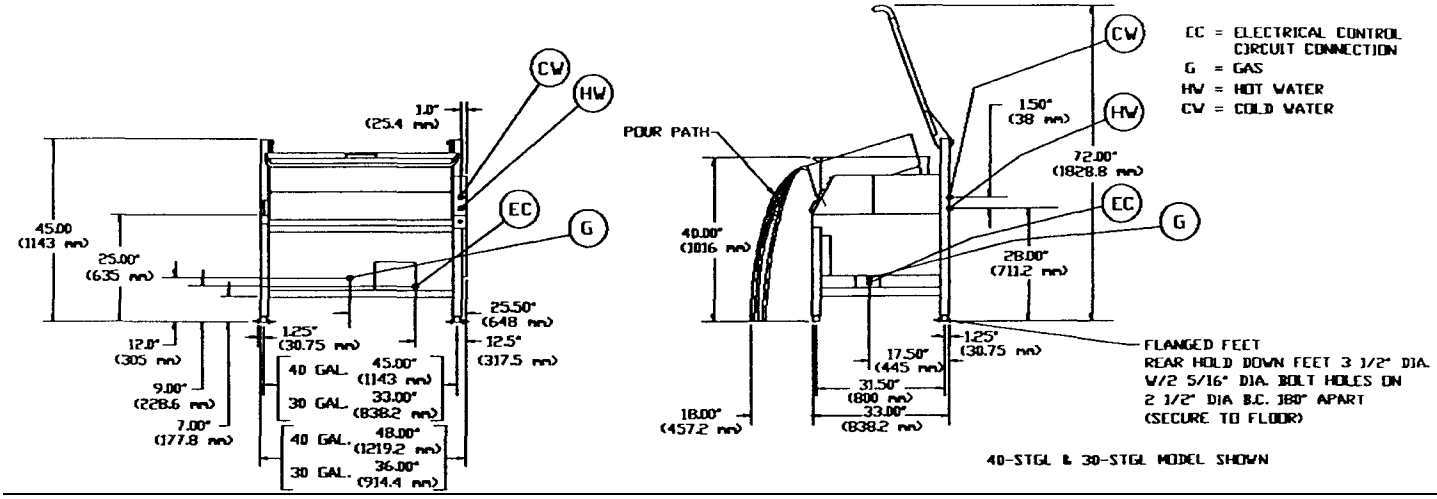
Controls: The UniVerse Tilting Skillet™ comes standard with a solid-state temperature controller with a positive OFF posi tion and 100°-450° Fahrenheit scale, a pilot light to indicate when the gas burners are ON, and a 1-hour mechanical time Optional power tilting mechanism also utilizes an UP/DOWN rocker switch. Manual tilting mechanism uses a collapsible hand crank located below the control panel. A high-limit tem perature control is also provided. The control housing sh;
be water-resistant/splash-proof.

Operation: The UniVerse Tilting Skillet™ Models 40-STGL and 40-STGL will be rated at 145,000 BTU at 4- W.C. natu ral gas and 10" W.C. propane gas. Models 30-STGM a 30-STGL will be rated at 108,750 BTU at 4" W.C. natu gas and 10" W.C. propane gas.

UNIVERSE TILTING SKILLET™

Market Forge Models:

40-STGM, 40-STGL, 30-STGM. 30-STGL



DIMENSIONS AND CAPACITY

Skillet Pan Internal Dimensions:

- Models 40-STGM and 40-STGL: 42.25" (1073 mm) wide X 9" (228 mm) deep X 25.75" (654 mm) front to back.
- Models 30-STGM and 30" STGL: 30.54" (776 mm) wide X 9" (228 mm) deep X 25.75" (654 mm) front to

Skillet Pan Capacity:

- Models 40-STGM and 40-STGL: 40 gallons (152 liters)
- Models 30-STGM and 30-STGL: 30 gallons (114 liters)

ELECTRICAL CHARACTERISTICS

Control Circuit: 120V AC, 60 Hz, 1-phase, 1/2" (13 mm) conduit, 6 amps max.

If the equipment is to be installed where the elevation exceeds 2,000 feet (609.9 meters) above sea level, specify installation altitude so that proper gas orifices can be provided. Allow 2" at rear and 0" at sides if adjacent walls are combustible. May be installed on combustible floor.

Gas connection: 3/4-(19 mm) NPT

Manifold Gas Pressure and Inputs:

	W.C.	40-STGM 40-STGL BTU	30-STGM 30-STGL BTU
• Natural standing pilot	4"	145,000	108,750
• Propane standing pilot	10"	145,000	108,750
• Natural pilotless ignition	4"	145,000	108,750
• Propane pilotless ignition	10"	145,000	108,750

Incoming gas pressure must not exceed 14" (357 mm) W.C.

WATER CONNECTIONS

Cold Water: 3/8" NPT to cold water faucet
Hot Water: 3/8" NPT to hot water faucet

Water Pressure Requirements: 50 psi (3.5 kg/cm^2) max.; 25 psi (1.8 kg/cm^2) min.

Water connections are optional when required.

OPTIONS

Optional at No Cost:

❑Power tilt mechanism

Optional at Extra Cost:

❑ Pan support
❑ Removable liquid strainer
❑ 12" X 20" (305 mm X 508 mm) pan holder inserts (pan not included)

❑ Tangent draw-off valve	❑ Gas quick connect kit
❑ Single spray hose	❑ Single pantry faucet
❑ Double spray hose	❑ Double-deck faucet
❑ Caster kit	❑ Pilotless ignition system

Installation of UniVerse Tilting Skillet™ (with Pilot)

MODELS: 30-STGL, 40-STGL, 30-STGM, 40-STGM, Gas, Standing Pilot
30-STGL-LX, 40-STGL-LX, 30-STGM-LX, 40-STGM-LX, Gas, Standing Pilot with Power Tilt

GENERAL INSTALLATION

1. Remove carton from skid, being careful not to dent or scratch finished surfaces of unit.

2. Inspect unit carefully for shipping damage. File claim with carrier immediately if damage is found.

3. Remove screws holding unit to skid.

4. Transfer unit to desired position and make level and steady by adjusting feet to compensate for floor irregularities. Bolt the flange feet to floor.

5. Raise skillet cover to full OPEN position. Raise skillet by turning handcrank clockwise. Check to make sure burners and carry-over tube are in position and securely seated.

6. Lower skillet by turning handcrank counterclockwise until fully seated on frame. Skillet is equipped with interlock switch, which does not permit burners to ignite until skillet is lowered to less than 10° off normal horizontal cooking position.

   NOTE: "LX" models may be raised or lowered using tilt switch after connecting to electrical supply.

7. Gas service connections:
   a. This unit is factory-adjusted for gas consumption of 108,750 Btu/Hr. (on 30-gallon unit) or 145,000 Btu/Hr. (on 40-gallon unit) at the pressure indicated. Please read the rating plate on top of control box. If this plate is marked for a different gas than that supplied, notify your dealer immediately.
      Do not connect gas lines. Only a qualified installer or service man should make the installation.
   b. Use new 3/4 I.P.S. iron or steel pipe complying with ANSI Standard for Wrought-Steel and Wrought-Iron Pipe B36—latest edition, properly threaded, reamed, and free from chips, oil, and dirt.
      If pipe dope is used, apply a moderate amount, leaving two end threads bare. Connect the gas line into bottom (inlet) side of shutoff valve with a union and make accessible to the operator.
   c. Natural gas units are equipped with a pressure regulator factory-adjusted to give 4" (102 mm) water column manifold pressure. The supply pressure must be at least 5" (127 mm) water column pressure.
   d. Propane gas units are equipped with a pressure regulator factory-adjusted to give 10" (254mm) water column manifold pressure. The supply pressure must be at least 11" (279 mm) water column pressure.
   e. Maximum supply pressure must not exceed 1/2 psig (3.45 k/PA) for both natural and propane gas.
   f. Perform a gas leak test of all newly-made joints, as well as those leading to the main gas control valve and pilot burner, using a soap solution. DO NOT USE FLAME.

8. Electrical service connection:
   Connect skillet controls to 110/120 volt AC, 60 Hz, single-phase branch circuit rated 15 amps capacity. Wiring will conform to the requirements of national and local electrical codes (220 volts, 50 Hz, single-phase for export units). ONLY A LICENSED ELECTRICIAN SHOULD MAKE ELECTRICAL CONNECTION.

INSTALLATION WITH CASTERS

1. Installation shall be made with a connector that complies with the Standard for Connectors for Moveable Gas Appliances, CAN/CGA-6.16, and a quick-disconnect device that complies with the Standard for Quick-Disconnect Devices for Use with Gas Fuel, ANSI Z21.41 01 the Standard for Quick-Disconnect Devices for Use with Gas Fuel, CAN-6.9

2. Adequate means must be provided to limit the movement of the appliance without depending on the connector and the quick-disconnect device or its associated piping to limit the appliance movement.

3. The location(s) where the restraining means may be attached to the appliance shall be specified.

Caution: Be Sure to Read

- Keep this appliance area free and clear of combustibles.
- Do not obstruct the flow of combustion and ventilation air.
- Allow adequate ventilation to unit. Install under exhaust hood.
- Keep this manual for future reference.
- This installation must conform with local codes or, in the absence of local codes, with National Fuel Gas code, ANSI Z223.1—latest edition; or the Natural Gas Installation Code, CAN/CGA—B 149.1; or the Propane Installation Code, CAN/CGA—B 149.2, as applicable.
- The griddle and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressure in excess of 1/2 psig (3.45 k/PA).
- The griddle must be isolated from the gas supply system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than *1/2*" psig (3.45 k/PA).
- When installed, this appliance must be electrically grounded in accordance with local codes, or, in the absence of local codes, with the National Electric Code. ANSI/NFPA No. 70—latest edition.
- In Canada, this installation must conform to C.S.A. Standard C22.1 Canadian Electrical Code, Part 1.
- The wiring diagram adhesive label is located on the inside of the control box cover.
- The product must be installed in a room with adequate air supply for complete gas combustion.
- Do not place on or directly against the unit any objects that would block air openings into the combustion chamber.
- Suitable for use on combustible floors.
- Clearances from both combustible and noncombustible construction are 0" (0 mm) from side walls, 2" (51 mm) from rear wall.
- This unit is serviceable from the front. Do not install in such a manner that a service person cannot remove front panels if provided.
- This unit does not have a flexible cord wired into electrical system.

LIGHTING INSTRUCTIONS FOR TILTING SKILLET PILOT AND BURNERS

1. Turn the thermostat to OFF position.
2. Raise the skillet all the way up for access to pilot and gas control.
3. Depress and turn control gas cock dial to OFF position.
4. Wait 5 minutes to allow gas that may have accumulated in the main burner compartment to escape.

Light pilot as follows:

1. Turn gas cock dial to PILOT position.
2. Depress gas cock dial and light pilot; with pilot burning, hold gas cock dial depressed for approximately a half minute before releasing.

NOTE: If pilot does not remain lighted, repeat Step 2, allowing a longer period of time before releasing gas cock dial. (Adjust pilot flame if necessary.)

3. Turn gas cock dial to ON position.
4. Lower skillet to normal horizontal cooking position.
5. Turn thermostat to desired temperature position.

SHUTDOWN INSTRUCTIONS

1. Turn the thermostat to OFF position.
2. Raise skillet all the way up for access to gas control.
3. Depress and turn control gas cock dial to OFF position.
4. Lower skillet to normal horizontal cooking position.

Installation of UniVerse Tilting Skillet™ (with Pilotless Ignition)

MODELS: 30-STGL-4, 40-STGL-4, 30-STGM-4,40-STGM-4, Gas, Pilotless Ignition
30-STGL-4LX, 40-STGL-4LX, 30-STGM-4LX, 40-STGM-4LX, Gas, Pilotless Ignition with Power Tilt

GENERAL INSTALLATION

1. Remove carton from skid, being careful not to dent or scratch finished surfaces of unit.

2. Inspect unit carefully for shipping damage. File claim with carrier immediately if damage is found.

3. Remove bolts holding unit to skid.

4. Transfer unit to desired position and make level and steady by adjusting feet to compensate for floor irregularities. Bolt the flange feet to floor.

5. Raise skillet cover to full OPEN position. Raise skillet by turning handcrank clockwise. Check to make sure burners and carry-over tube are in position and securely seated.

6. Lower skillet by turning handcrank counterclockwise until fully seated on frame. Skillet is equipped with interlock switch, which does not permit burners to ignite until skillet is lowered to less than 10° off normal horizontal cooking position.

NOTE: "LX" models may be raised or lowered using rocker switch when connected to electric supply.

7. Gas service connections:
   a. This unit is factory-adjusted for gas consumption of 108,750 Btu/Hr. (on 30-gallon units) or 145,000 Btu/Hr. (on 40-gallon units) at the pressure indicated. Please read the rating plate on top of control box. If this plate is marked for a different gas than that supplied, notify your dealer immediately.
      DO NOT CONNECT GAS LINES. ONLY A QUALIFIED INSTALLER OR SERVICE MAN SHOULD MAKE THE INSTALLATION.
   b. Use new 3/4 I.P.S. iron or steel pipe complying with ANSI Standard for Wrought-Steel and Wrought-Iron Pipe B36—latest edition, properly threaded, reamed, and free from chips, oil, and dirt.
      If pipe dope is used, apply a moderate amount, leaving two end threads bare. Connect the gas line into bottom (inlet) side of shutoff valve with a union and make accessible to the operator.
   c. Natural gas units are equipped with a pressure regulator factory-adjusted to give 4" (102 mm) water column manifold pressure. The supply pressure must be atleast 5" (127 mm) water column pressure.
   d. Propane gas units are equipped with a pressure regulator factory-adjusted to give 10" (254 mm) water column manifold pressure. The supply pressure must be atleast 11" (279 mm) water column pressure.
   e. Maximum supply pressure must not exceed 1/2 psi. (3.45 k/PA) for both natural and propane gas.
   f. Perform a gas leak test of all newly-made joints, a well as those leading to the main gas control valve. and pilot burner, using a soap solution. DO NOT USE FLAME.

8. Electrical service connection:
   Connect skillet controls to 110/120 volt AC, 60 Hz single-phase branch circuit rated 15 amps capacity. Wir ing will conform to the requirements of national and lo cal electrical codes (220 volts, 50 Hz, single-phase for export units). ONLY A LICENSED ELECTRICIAN SHOULD MAKE ELECTRICAL CONNECTION.

INSTALLATION WITH CASTERS

1. Installation shall be made with a connector that com plies with the Standard for Connectors for Moveable Ga Appliances, CAN/CGA-6.16, and a quick-disconnect device that complies with the Standard for Quick-Dis connect Devices for Use with Gas Fuel, ANSI Z21.41 c the Standard for Quick-Disconnect Devices for Use wit Gas Fuel, CAN-6.9

2. Adequate means must be provided to limit the movement of the appliance without depending on the connector and the quick-disconnect device or its associated piping to limit the appliance movement.

3. The location(s) where the restraining means may be attached to the appliance shall be specified.

Caution: Be Sure to Read

- Keep this appliance area free and clear of combustibles.
- Do not obstruct the flow of combustion and ventilation air.
- Allow adequate ventilation to unit. Install under exhaust hood.
- Keep this manual for future reference.
- This installation must conform with local codes or, in the absence of local codes, with National Fuel Gas code, ANSI Z223.1—latest edition; or the Natural Gas Installation Code, CAN/CGA—B 149.1; or the Propane Installation Code, CAN/CGA—B 149.2, as applicable.
- The griddle and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressure in excess of 1/2 psig (3.45 k/PA).
- The griddle must be isolated from the gas supply system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than *1/2*" psig (3.45 k/PA).
- When installed, this appliance must be electrically grounded in accordance with local codes, or, in the absence of local codes, with the National Electric Code, ANSI/NFPA No. 70—latest edition.
- In Canada, this installation must conform to C.S.A. Standard C22.1 Canadian Electrical Code, Part 1.
- The wiring diagram adhesive label is located on the inside of the control box cover.
- The product must be installed in a room with adequate air supply.
- Do not place on or directly against the unit any objects that would block air openings into the combustion chamber.
- Suitable for use on combustible floors.
- Clearances from both combustible and noncombustible construction are 0" (0 mm) from side walls, 2" (51 mm) from rear wall.
- This unit is serviceable from the front. Do not install in such a manner that a service person cannot remove front panels if provided.
- This unit does not have a flexible cord wired into electrical system.

LIGHTING INSTRUCTIONS FOR TILTING SKILLET GLOW COIL

1. Turn the thermostat counterclockwise to OFF position.
2. Wait 5 minutes to allow gas that may have accumulated in the main burner compartment to escape.
3. Turn thermostat to desired temperature position.
   NOTE: Gas will ignite approximately 40 seconds after thermostat is set at desired temperature.

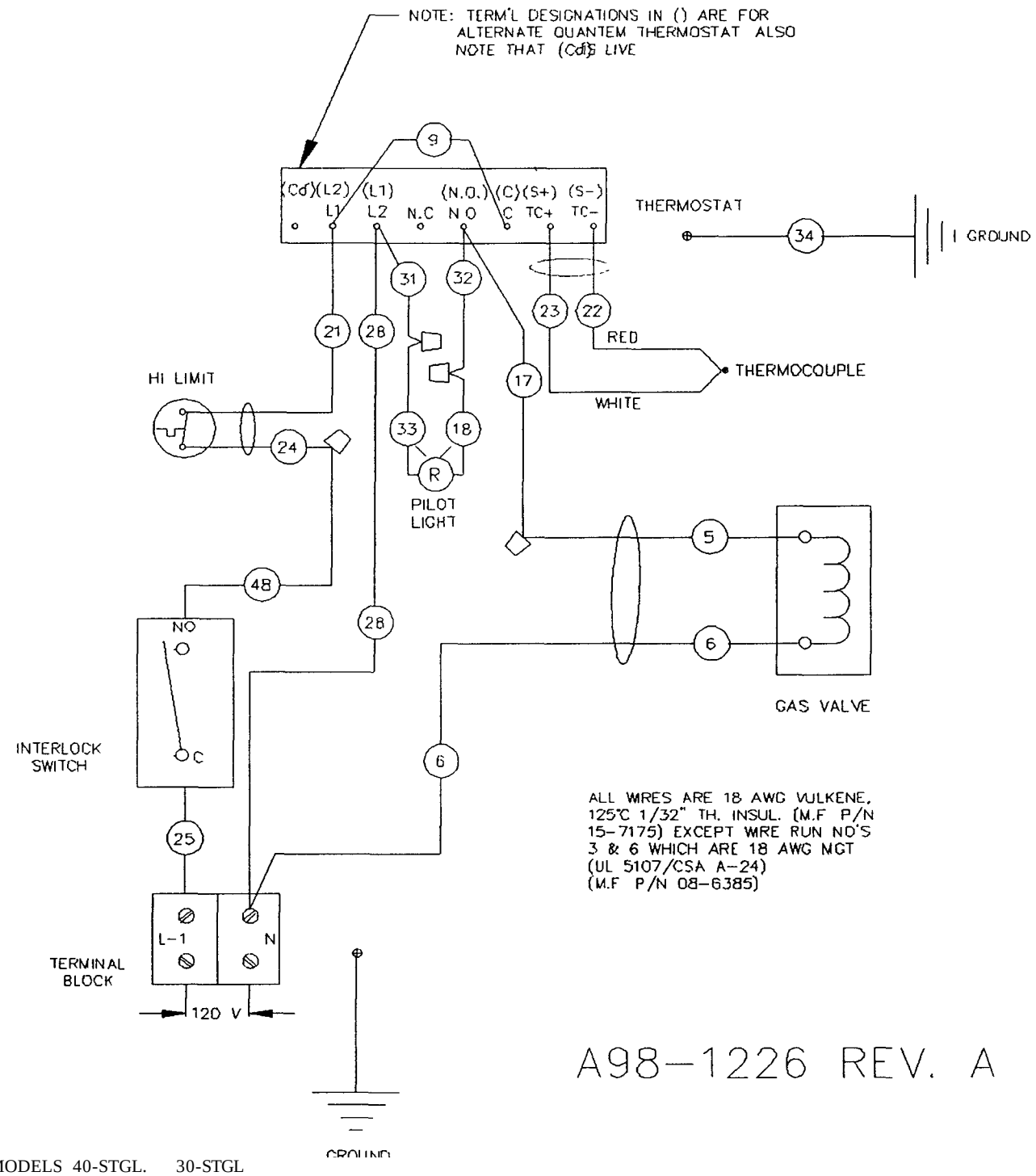
SHUTDOWN INSTRUCTIONS

Turn the thermostat counterclockwise to OFF position.

PROLONGED SHUTDOWN

1. Turn the thermostat counterclockwise to OFF position.
2. Turn gas valve located on bottom right rear to OFF position.

FIG. 2.1
WIRING DIAGRAM, MANUAL TILT STANDING PILOT UNITS



MODELS 40-STGL. 30-STGL
40-STGM, 30-STGM

FIG. 2.2

WIRING DIAGRAM, POWER LIFT STANDING PILOT UNITS

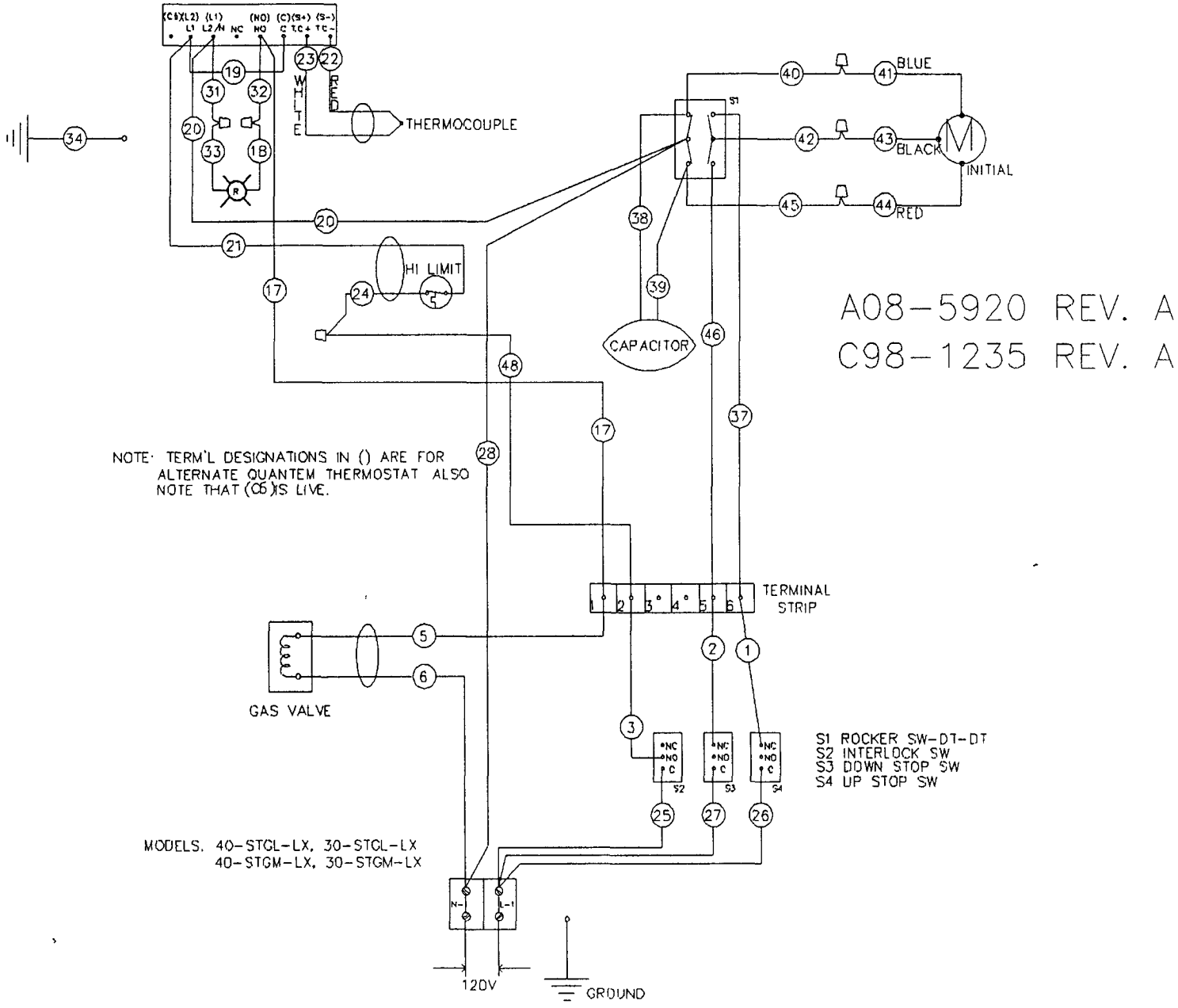


FIG. 2.3

WIRING DIAGRAM, MANUAL TILT CARBORUNDUM UNITS

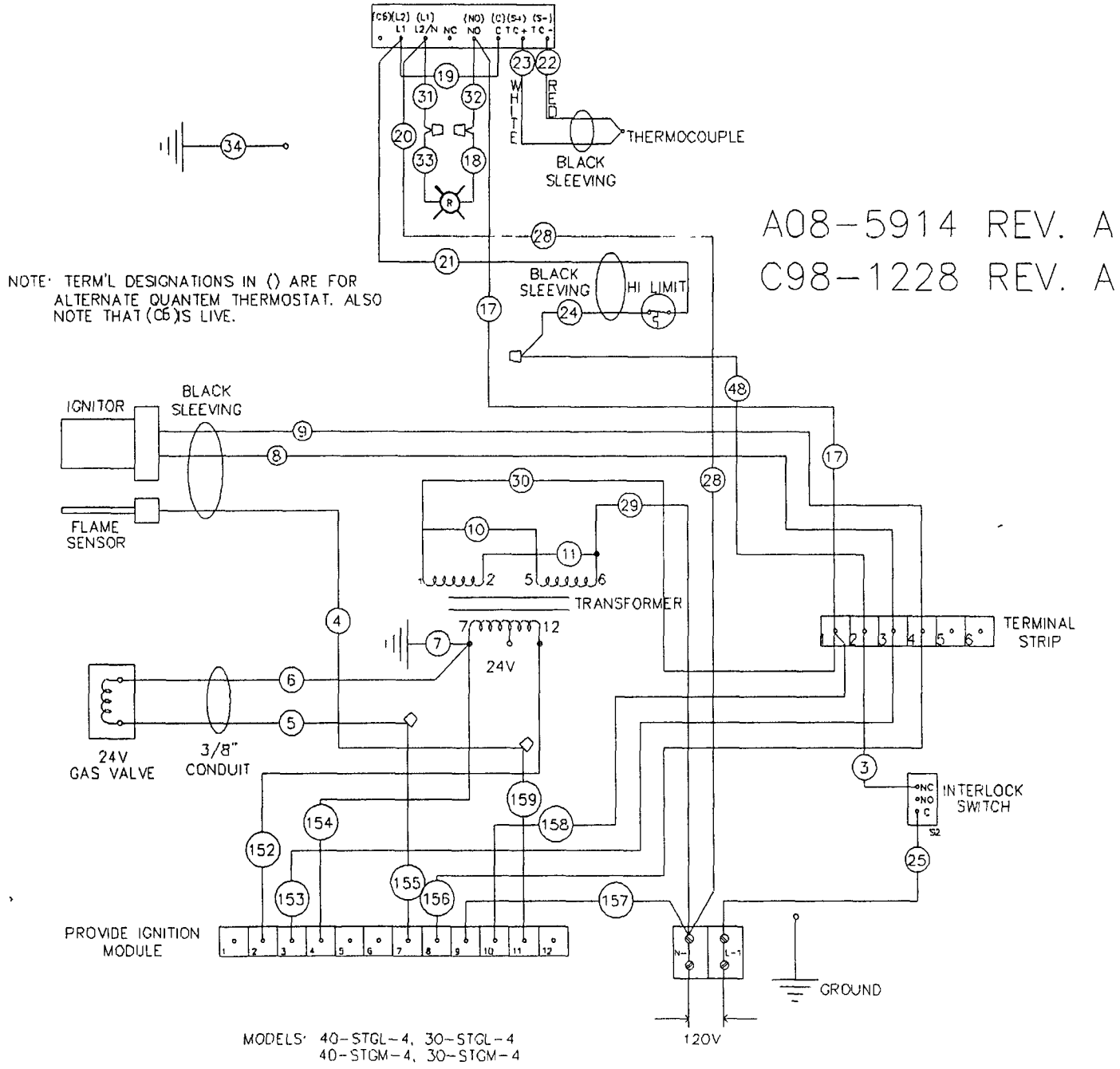
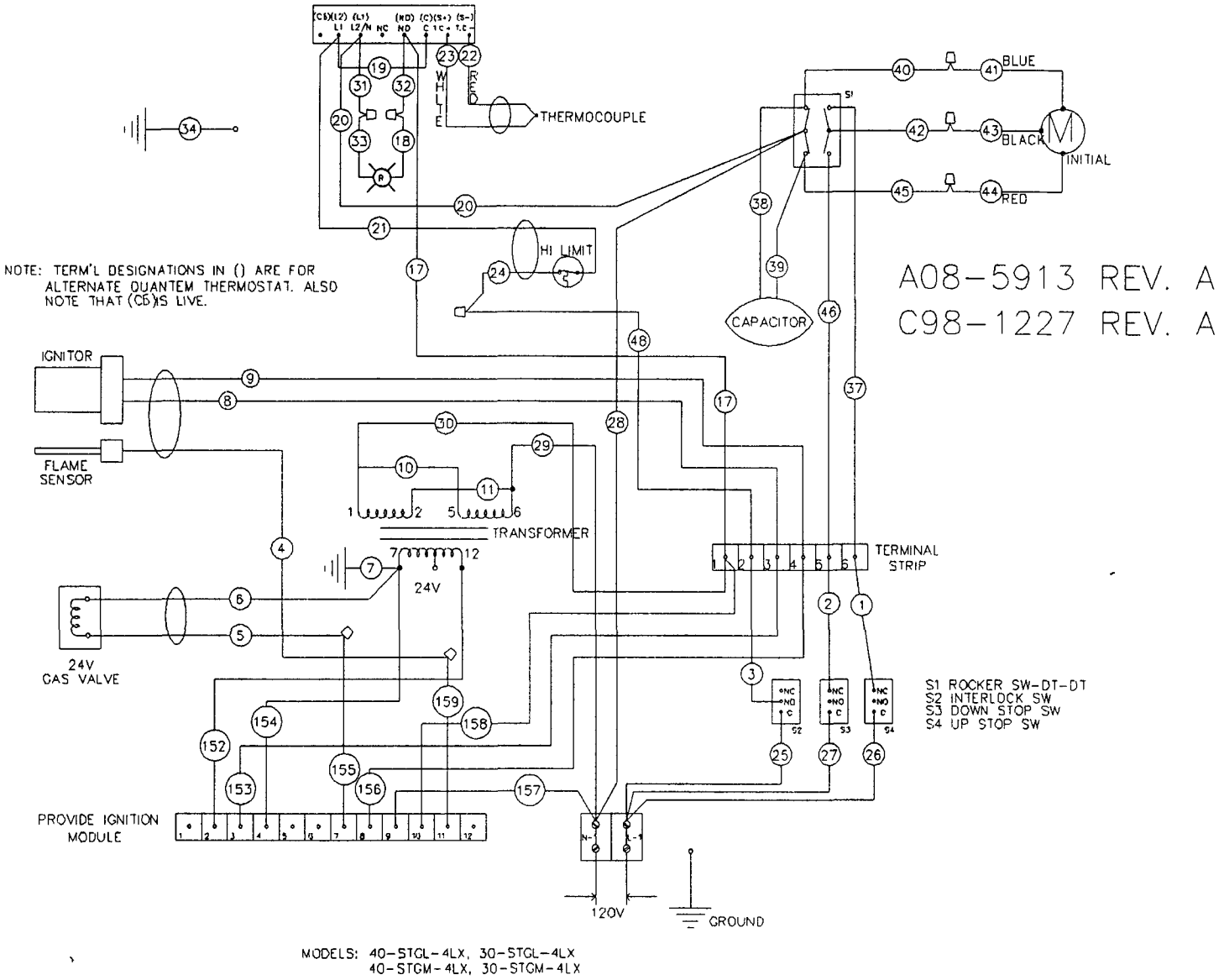


FIG. 2.3

WIRING DIAGRAM, POWER TILT CARBORUNDUM UNITS



MODELS: 40-STGL-4LX, 30-STGL-4LX
40-STGM-4LX, 30-STGM-4LX

SECTION 3
OPERATING INSTRUCTIONS
UniVerse Tilting Skillet™

MODELS: 30-STGL, 30-STGL-LX, 40-STGL, 40-STGL-LX, Open-Leg Gas UniVerse Skillet
30-STGM, 30-STGM-LX, 40-STGM, 40-STGM-LX, Modular Gas UniVerse Skillet

INTRODUCTION

This technical manual contains general information, installation, operation, principles of operation, troubleshooting guide, and maintenance information for the UniVerse Tilting Skillet. Also included is an illustrated parts list and a directory of authorized parts and service agencies.

Description

The Market Forge Industries UniVerse Models 30-STGL (108,750 Btu input) and 40-STGL (145,00 Btu input) are electrically operated skillets, tilting type, with 30- and 40-gallon capacities, respectively. They are equipped with a solid state thermostat and high-limit control with a 100°F-to-450°F temperature scale.

Basic Functions

The UniVerse Tilting Skillet is a very versatile cooking appliance. It can perform basic cooking functions, such as braising meat, sauteing, pan-frying chicken, steaming vegetables, boiling, and simmering. Refer to Section 4—Test Kitchen Bulletin, which gives detailed information on the various types of food products that can be cooked in the skillet.

Operation of UniVerse Tilting Skillet™ (with Pilot)

MODELS: 30-STGL, 40-STGL, 30-STGM, 40-STGM, Gas, Standing Pilot
30-STGL-LX, 40-STGL-LX, 30-STGM-LX, 40-STGM-LX, Gas, Standing Pilot with Power Tilt

1. Check to see that the correct gas connection has been made to the unit, the electric 110/120-volt connection has been made, and the pilot has been lighted. (Instructions for lighting pilot are on a plate on control box.) REF. SECTION 2.
2. Be sure skillet has been or is cleaned before using.
3. Turn main gas cock to ON.
4. Be certain skillet is lowered to the normal horizontal cooking position (or as much as 10° above) so burners will light.
5. Set the thermostat to the desired temperature. See Section 4—Test Kitchen Bulletin for thermostat settings.
6. Preheat to desired setting before grilling, pan frying, or any other type of cooking except boiling.

   NOTE: For best results, allow unit to cycle ON/OFF once.
7. Cover should be up for most types of cooking, except simmering or boiling. The cover has a lip at the rear that will direct condensate into the skillet rather than onto the cabinet base.
8. When food is cooked, it should be immediately removed from skillet to prevent overcooking.
9. To lower skillet, merely turn tilt skillet handcrank counterclockwise. To raise skillet, turn handcrank clockwise.

   NOTE: "LX" models are raised and lowered using switch on front of control box.
10. For cleaning instructions, see Section 6—Troubleshooting and Maintenance.

Caution: Be Sure to Read

- Disconnect the power supply to skillet before cleaning or servicing. (NOTE: "LX" models should have the skillet raised to washing position before disconnecting power supply.)
- Keep this appliance area free and clear of combustibles.
- Do not obstruct the flow of combustion and ventilation air.
- If skillet pan is difficult to raise, the lift gears may need to be lubricated. The gears are located on the right side under the control box. Apply a liberal amount of grease along the helical thread of the worm where it engages the worm gear. Use multipurpose, NLGI #2 lithium-based, water-resistant grease.
- Keep this manual for future reference.
- Consult the factory, the factory representative, or a local service company to perform maintenance and repairs.
- In the event of a power failure, do not operate appliance.
- Periodically examine the flue outlet located behind the skillet cover for any obstructions.
- Appliances with casters are always to be restrained from movement. If removal of the restraint is necessary, always reconnect the restraint when the appliance is returned to its originally installed position.

Operation of UniVerse Tilting Skillet™ (with Pilotless Ignition)

MODELS: 30-STGL-4,40-STGL-4, 30-STGM-4,40-STGM-4, Gas, Pilotless Ignition
30-STGL-4LX, 40-STGL-4LX, 30-STGM-4LX, 40-STGM-4LX, Gas, Pilotless Ignition with Power Tilt

1. Check to see that the correct gas connection has been made to the unit, the electric 110/120-volt connection has been made, and the pilot has been lighted. (Instructions for lighting pilot are on a plate on control box.) REF. SECTION 2.

2. Be sure skillet has been or is cleaned before using.

3. Be certain skillet is lowered to the normal horizontal cooking position (or as much as 10° above) so burners will light.

4. Set the thermostat to the desired temperature. See Section *A*—Test Kitchen Bulletin for thermostat settings.

5. Preheat to desired setting before grilling, pan frying, or any other type of cooking except boiling.

   NOTE: For best results, allow unit to cycle ON/OFF once.

6. Cover should be up for most types of cooking, except simmering or boiling. The cover has a lip at the rear that will direct condensate into the skillet rather than onto the cabinet base.

7. When food is cooked, it should be immediately removed from skillet to prevent overcooking.

8. To lower skillet, merely turn tilt skillet handcrank counterclockwise. To raise skillet, turn handcrank clockwise.

   NOTE: "LX" models are raised and lowered using switch on front of control box.

9. For cleaning instructions, see Section 6—Troubleshooting and Maintenance.

Caution: Be Sure to Read

- Disconnect the power supply to skillet before cleaning or servicing. (NOTE: "LX" models should have the skillet raised to washing position before disconnecting power supply.)
- Keep this appliance area free and clear of combustibles.
- Do not obstruct the flow of combustion and ventilation air.
- If skillet pan is difficult to raise, the lift gears may need to be lubricated. The gears are located on the right side under the control box. Apply a liberal amount of grease along the helical thread of the worm where it engages the worm gear. Use multipurpose, NLGI #2 lithium-based, water-resistant grease.
- Keep this manual for future reference.
- Consult the factory, the factory representative, or a local service company to perform maintenance and repairs.
- In the event of a power failure, do not operate appliance.
- Periodically examine the flue outlet located behind the skillet cover for any obstructions.
- Appliances with casters are always to be restrained from movement. If removal of the restraint is necessary, always reconnect the restraint when the Appliance is returned to its originally installed position.

UniVerse Tilting Skillet™

MODELS: 30-STGL, 30-STGL-LX, 40-STGL, 40-STGL-LX, Open-Leg Gas UniVerse Skillet
30-STGM, 30-STGM-LX, 40-STGM, 40-STGM-LX, Modular Gas UniVerse Skillet

COOKING FACTS ON PARADE

1. The UniVerse Skillet is one of the most versatile pieces of equipment to be found in any restaurant or institutional kitchen.
2. This unit will stew, simmer, pan-fry, braise, grill, and saute—and all with a very uniform heat pattern.

   NOTE: Do not attempt to deep fry with your skillet!
3. For best results, the Tilting Skillet should always be preheated and allowed to cycle once.
4. A great deal of heavy lifting and transferring of foods from one pan to another can be eliminated, and, therefore, pot washing will be reduced.
5. This type of equipment usually reduces the total cooking time by as much as 25% on combination dishes.
6. Sauces usually lose less moisture, as the cover reduces evaporation.
7. Large batches of gourmet items can be prepared with less work and with more uniform results.
8. Frozen vegetables can be cooked in the UniVerse Skillet in the serving pan, then removed and transferred directly to the serving line.
9. The following temperatures should be used:

Simmering:	maximum of 200°F
Sauteing:	225-275°F
Searing:	300-350°F
Frying:	325-375°F
Grilling:	350-425°F

10. Temperatures of approximately 200°F should always be used for milk-based products, or scorching will take place. Lower temperatures (150-175°F) prevent thickening.
11. Some items should be started at a high temperature and then reduced. This permits sealing for about 20% of the time and cooking for the remaining 80%.
12. The cover has a lip at the back edge that directs the condensate on the cover back into the skillet.
13. The unit tilts easily to 90°, and receiving pan is always approximately 2 inches from the pouring lip of the skillet.
14. The stainless steel UniVerse Skillet is rapidly cleaned with a mild detergent. Water, waste, and scraps are easily removed into the receiving pan for disposal. (It is always recommended that this type of unit be presoaked if possible.)
15. Breakfast foods such as sausage, bacon, pancakes, fried eggs, scrambled eggs, and French toast are a few of the more common items that can be cooked in the UniVerse Skillet.
16. When cooking meat or poultry, all pieces should be of fairly uniform size and weight and should be turned at least once while simmering.
17. This unit can be converted to a proof box by placing a small amount of water in the pan to form steam and then placing the food in another pan. The thermostat should be set very low (100-150°F).
18. The unit can also be used as a holding cabinet by adding; water and setting the thermostat at approximately 175°F
19. When using water over and over for vegetable cookery be sure to add water occasionally to keep level at about 3-4 inches. Thermostat should be set at 250°F.
20. Perforated 2 1/2 "-deep pans are suggested for vegetable for the most satisfactory results. The pan can then be removed easily and transferred to the serving line.

TABLE 4.1
COOKING PORTIONS AND TIMES

THE UNIVERSE SKILLET

All Modular & Tubular Leg Models

The UniVerse Skillet is one of the most versatile pieces of equipment to be found in any restaurant or institutional kitchen. It enables the cook to stew, simmer, pan-fry, braise, grill, or saute, and all with a very uniform heat pattern. The figures given below are suggested quantities and temperature settings and estimated numbers of orders per load and per hour. When two temperatures are given, the first is to start the product, the second to finish the product.

Item	Portion Size	Thermostat Setting	Batches Per Hour	30 Gal. Per load Qty.	30 Gal. Per load Yield	40 Gal. Per Load Qty.	40 Gal. Per Load Yield
BREAKFAST FOODS							
Bacon	3 slices	350°	12	2#	10	3#	15
Eggs							
Boiled—Hard	1egg	225°	5	50	50	75	75
Boiled—Soft	1egg	225°	8	50	50	75	75
Fried	1egg	400°	4	30	30	45	45
Poached	1egg	225°	5	36	36	60	60
Scrambled	1 1/2 eggs	300° 200°	1	18 gal	720	28 gal.	1100
French Toast	3 slices	450°	7	35 slices	12	50 slices	17
Regular Oatmeal	*1/2* cup	250°	2	20#	500	40#	1000
Pancakes	2 each	400°	10	30 ea.	15	50 ea.	25
FISH							
Clams	1 pt.	400°	10	10 qts.	20	15 qts.	30
Fish Cakes	2-3 oz.	400°	5	70—3 oz.	35	110—3 oz.	55
Haddock Filet	4 oz.	400°	4	60—4 oz.	60	90-4 oz.	90
Halibut Steak	5 oz.	450°	3	60—4 oz.	60	90—4 oz.	90
Lobster	1—1#	350°	4	20—1#	20	30—1#	30
Swordfish	5 oz.	450°	3	50—5 oz.	50	75—5 oz.	75
SAUCES, GRAVIES, SOUPS							
Brown Gravy	1 oz.	350° 200°	2	18 gals.	2300	35 gals.	4500
Cream Sauces	2 oz.	250° 175°	1	18 gals.	1150	35 gals.	2250
Cream Soup	6 oz.	200°	1	18 gals.	375	35 gals.	725
French Onion Soup	6 oz.	225°	1	18 gals.	350	35 gals.	700
Meat Sauce	4 oz.	350° 200°	1	18 gals.	575	35 gals.	1100

TABLE 4.1
COOKING PORTIONS AND TIMES—*cont'd.*

ITEM	PORTION SIZE	THERMOSTAT SETTING	BATCHES PER HOUR	30 GAL. PER LOAD		40 GAL. PER LOAD	
				QTY	YIELD	QTY	YIELD
VEGETABLES							
Canned	3oz.	400°	6	30#	125	45#	200
Fresh							
Beans—Wax, Green	3 oz.	400°	3	25#	125	50#	250
Beets	3oz.	400°	1	30#	125	60#	300
Broccoli	3oz.	400°	3	25#	125	40#	200
Cabbage	3 oz.	400°	5	20#	80	30#	125
Carrots	3oz.	400°	2	35#	150	70#	300
Cauliflower	3oz.	250°	5	15#	75	25#	125
Corn	1 ear	400°	8	50 ears	50	75 ears	75
Potatoes	3 oz.	400°	2	40#	200	60#	300
Spinach	4 oz.	250°	10	6#	25	9#	35
Turnips	4 oz.	400°	2	20#	100	30#	150
Frozen							
Beans—French, Green	3 oz.	400°	6	15#	60	22 1/2#	90
Lima Beans	3 oz.	250°	4	15#	60"	22 l/2#	90
Broccoli	3oz.	400°	8	12#	50	18#	75
Sliced Carrots	3 oz.	250°	6	15#	60	22 1/2#	90
Small Whole Carrots	3oz.	250°	3	15#	50	22 1/2#	90
Corn	3 oz.	250°	18	15#	50	22 1/2#	90
Small Whole Onions	3oz.	250°	7	15#	50	22 1/2#	90
Peas	3oz.	400°	10	15#	75	22 1/2#	110
Spinach	3oz.	400°	3	15#	75	22 l/2#	110
DESSERTS, PUDDINGS, SWEET SAUCES							
Butterscotch Sauce	1 oz.	200°	1	18 gals. 2300		35 gals. 4500	
Cherry Cobbler	3oz.	200°	1	18 gals. 750		35 gals. 1500	
Chocolate Sauce	1oz.	200°	1	18 gals. 2300		35 gals. 4500	
Comstarch Pudding	4 oz.	200°	1	18 gals. 575		35 gals. 1100	
Fruit Gelatin	3oz.	250°	2	18 gals. 750		35 gals. 1500	

SECTION 5
ILLUSTRATED PARTS LIST

UniVerse Tilting Skillet™

MODELS: 30-STGL, 30-STGL-LX, 40-STGL, 40-STGL-LX, Open-Leg Gas UniVerse Skillet
30-STGM, 30-STGM-LX, 40-STGM, 40-STGM-LX, Modular Gas UniVerse Skillet

TABLE 5.1
UNIVERSE SKILLET, TOP ASSEMBLY

ITEM	30 GAL PART NO.	40 GAL.PART NO.	DESCRIPTION	30 GAL. QTY	40GAL. QTY
1	98-1296	98-1295	FRAME WELD ASSY.	1	1
2	98-1010	98-1010	GEAR BOX	1	1
3	98-1031	98-1031	ASSY, BEARING SUPPORT	1	1
4	98-1339	98-1339	BEARING MOUNT LEFT	1	1
5	98-1300	98-1300	BEARING MOUNT RIGHT	1	1
6	98-1327	98-1008	PAN ASSY., STANDING PILOT	1	1
6A	98-1245	98-1358	PAN ASSY., CARBORUNDUM	1	1
7	REF	REF	SHAFT	1	1
8	08-7809	08-7809	SHOULDER SCREW	2	2
9	98-1311	98-1093	STIFFENER, PAN COVER	1	1
10	98-1310	98-1090	COVER	1	1
11	98-1012	98-1012	HINGE	2	2
12	91-9325	91-9325	KNOB	4	4
13	91-9262	91-9262	ARM, VENT COVER	1	1
14	91-9261	91-9261	VENT COVER	1	1
15	98-1346	98-1346	NEMA BOX ASSY, STANDING PILOT MANUAL LIFT	1	1
15A	98-1345	98-1345	NEMA BOX ASSY, STANDING PILOT POWER LIFT	1	1
15B	98-1345	98-1345	NEMA BOX ASSY, CARBORUNDUM MANUAL LIFT	1	1
15C	98-1342	98-1342	NEMA BOX ASSY, CARBORUNDUM POWER LIFT	1	1
17	98-1068	98-1068	WELD ASSY, CAM LIFT	1	1
18	98-1538	98-1539	WELD ASSY, TILT MECHANISM, (NEWER DESIGN)	1	1
19	98-1258	98-1258	ARM, EXTENSION	2	2
20	REF	REF	ARM, LIFT	2	2
21	08-7810	08-7810	RIVNUT, 5/16 THD	2	2
22	REF	REF	SHOCK MOUNT, COMES WITH SHOCKS, NO NUMBER	4	4
23	08-7806	08-7827	GAS SHOCK	2	2
24	98-0985	98-0985	MOTOR, POWER LIFT OPTION	1	1
25	98-1348	98-1348	WELD ASSY, MOTOR MOUNTING BRACKET, POWER LIFT OPTION	1	1
26	98-1281	98-1281	CONTROL BOX	1	1
27	10-5520	10-5520	60 MIN. TIMER	1	1
28	09-5267	09-5267	TIMER KNOB	1	1
29	08-7913	08-7913	THERMOSTAT	1	1
30	REF	REF	THERMOSTAT KNOB, COMES WITH THERMOSTAT, NO NUMBER	1	1
31	10-5052	10-5052	LIGHT	1	1
32	98-1308	08-6320	POWER SWITCH PLUG, MANUAL LIFT	1	1
32A	08-6320	08-6320	POWER SWITCH. POWER LIFT OPTION	1	1
33	91-9144	91-9144	LEFT SPRING	1	1
34	91-9145	91-9145	RIGHT SPRING	1	1
35	08-7813	08-7813	INSERT 3/8	2	2
36	98-1234	98-1234	FLUE BOX ASSY.	1	1
37	98-0649	98-0649	BRACKET ASSY, GAS VALVE	1	1
38	10-2836	10-2836	3/4" X 3" B.I. NIPPLE	1	1
39	10-8459	10-8459	VALVE, MANUAL	1	1
40	98-1216	98-1216	UNIVERSAL, EXTENDED	1	1
41	98-1326	98-1326	WELD ASSY, CAM, UP AND DOWN, POWER LIFT OPTION	2	2
42	98-1333	98-1333	CRANK HANDLE, MANUAL LIFT	1	1
42A	98-1267	98-1267	CRANK HANDLE, POWER LIFT	1	1
43	98-1270	98-1270	HANDLE BRACKET, MANUAL LIFT	1	1

FIG. 5.1
UNIVERSE SKILLET, TOP ASSEMBLY

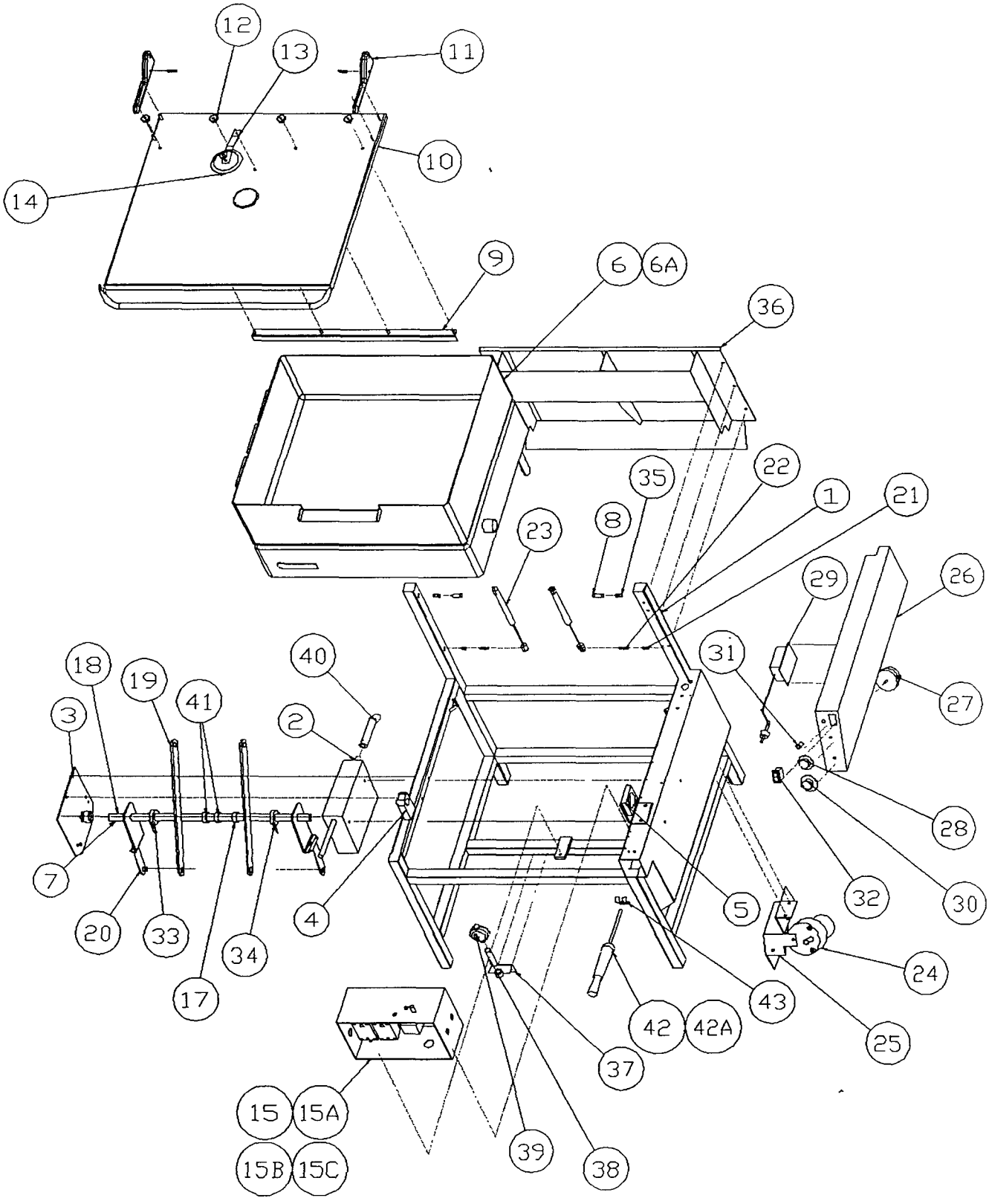


TABLE 5.2
UNIVERSE SKILLET, PAN ASSEMBLY

Parts List

ITEM	30 GAL. PART NO.	40 GAL. PART NO.	DESCRIPTION	30 GAL. OTY.	40 GAL. OTY.
1	98-1245	98-1225	PAN WELD ASSY. (30 GAL.)	1	1
2	98-1249	98-1299	COVER.FLUE BOX PAN	1	1
3	98-1364	98-1380	ALUMINUM EXTRUSION, MACHINED	1	1
4	98-1318	98-1046	ALUMINUM EXTRUSION	3	3
5	98-1072	98-1072	INSULATON COVER, SIDE	2	2
6	98-1086	98-1071	INSULATION COVER, FRONT (30 GAL.)	1	1
7	98-1347	98-1347	U-CHANNEL, LONG	5	8
8	98-1242	98-1242	THERMAL COUPLING	1	1
9	98-1243	98-1243	COUPLING, THERMAL SHEILDING	1	1
10	98-1314	98-1050	DEFLECTOR SHIELD (REAR)	1	1
11	08-5894	08-5894	MARKET FORGE NAME PLATE	1	1
12	98-1223	98-1223	U CHANELL, SHORT	1	1
13	98-1009	98-1009	BURNER, ASSY.(CARBORUNDUM UNLTS)	5	7
13A	98-1009	98-1009	BURNER, ASSY (STANDING PILOTS UNITS)	6	8
14	98-1076	98-1061	WELD ASSY. BURNER MA NIFOLD	1	1
15	98-1032	98-1403	CROSS OVER LIGHTING TUBE	1	1
16	98-1206	98-1206	BURNER, CARBORUNDUM IGNLTION	1	1
17	08-6452	08-6452	FLAME SENSOR, CARBORUNDUM UNITS	1	1
18	98-1074	98-1073	PANEL, BURNER COVER, INSULATION RETAINE	1	1
19	98-1075	98-1055	BURNER SHIELD COVER	1	1
20	98-1410	98-1410	ACCESS PANEL, BURNER COVER	1	1
21	98-1411	98-1411	ACCESS PANEL COVER	1	1
22					
23	10-2864	10-2864	PIPE 1/2" X 2" LONG CARBORUNDUM UNITS	3	3
23A	10-2864	10-2864	PIPE 1/2" X 2" LONG STANDING PILOT UNITS	2	2
24					
25	09-1150	09-1150	REGULATOR, NATURAL GAS, CARBORUMDUM	1	1
25	09-1151	09-1151	REGULATOR, PROPANE, CARBORUNDUM	[1]	1
26	98-1063	98-1063	FLEXHOSE	1	1
27	10-0957	10-0957	ORIFICE, NATURAL GAS	6	8
28	10-2921	10-2921	ORIFICE, PROPANE	6	8
29	10-6481	10-6481	ORIFICE, GARY OVER TUBE, NATURAL GAS	1	1
30	10-6482	10-6482	ORIFICE, CARY OVER TUBE, PROPANE	1	1
31	REF	REF	ELBOW, COMES WITH FLEX HOSE, NO NUMBER	1	1
32	98-1481	98-1481	GAS VALVE, NATURAL GAS	1	1
32A	98-1481	98-1481	GAS VALVE, PROPANE, (NEED ITEM # 40)	1	1
32B	08-7108	08-7108	GAS VALVE, CARBORUNDUM UNITS	1	1
33	10-2811	10-2811	1/2" STREET ELBOW	1	1
34	08-6383	08-6383	HI LIMIT THERMOSTAT	1	1
35	08-6305	08-6305	TEMPERATURE SENSOR	1	1
36	10-4758	10-4758	FLAME SENSOR, STANDING PILOT	1	1
37	10-5812	10-5812	STANDING PILOT, NATURAL GAS	1	1
37A	98-1199	98-1199	STANDING PILOT PROPA NE	1	1
38	10-8259	10-8259	IGNITOR CARBORUNDUM UNITS	1	1
39	08-7849	08-7849	1/4"O.D.S.S FLEX TUBING, 18" LG	2	2
40	08-7902	08-7902	KIT, CONVERSION, NATURAL TO PROPANE	1	1

FIG. 5.2
UNIVERSE SKILLET, PAN ASSEMBLY

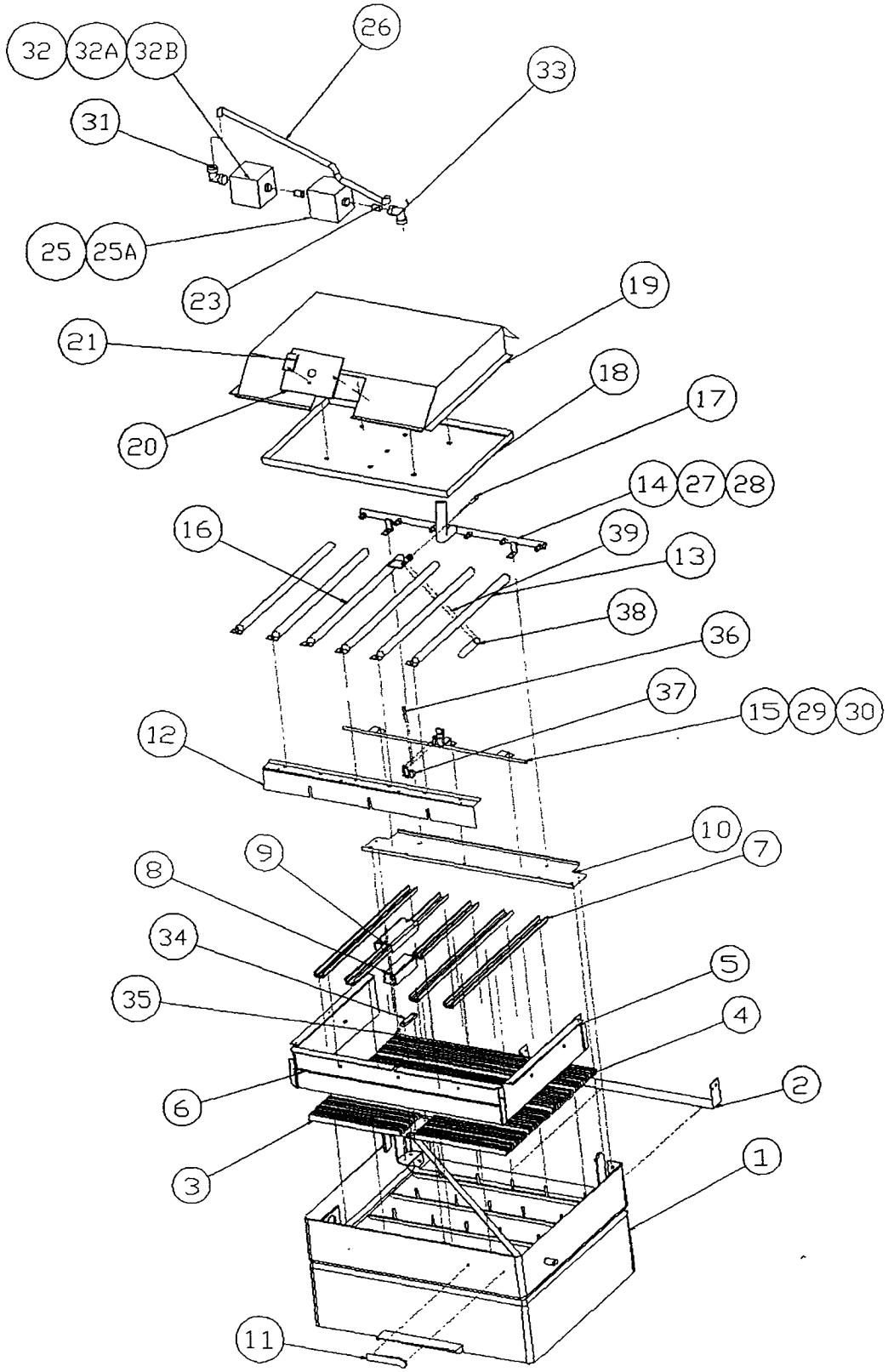


TABLE 5.3
UNIVERSE SKILLET, STANDING PILOT NEMA BOX ASSEMBLY

Parts List

ITEM	PART NO.	DESCRIPTION	QTY.
1	98-1336	NEMA BOX, LARGE	1
2	98-1265	MOUNTING PLATE, NEMA BOX	1
3	08-7901	MICROSWITCH, POWER TILT UNITS	3
3A	08-7901	MICROSWITCH, MANUAL TILT UNITS	1
4	10-5503	SECTION, TERMINAL BLOCK, BLACK	2*
4A	10-5070	END PIECE, TERMINAL BLOCK, BLACK	1
5	10-5220	ELECTRICAL GROUND	1
6	10-6005	TERJMINAL STRIP	1
7	REF	CAPACITOR, COMES WITH MOTOR	1
8	91-9178	CAPACITOR BRACKET, POWER LIFT OPTION	1
9	08-7826	MICROSWITCH HOLE PLUG, MANUAL TILT UNITS	2
10	08-7846	BOOT, RUBBER, MICROSWITCH	1
10A	08-7846	BOOT, RUBBER, MICROSWITCH	2*

*0nly 208 V and 240V units have 2 terminal block sections; all others have 1.

FIG. 5.3
UNIVERSE SKILLET, STANDING PILOT NEMA BOX ASSEMBLY

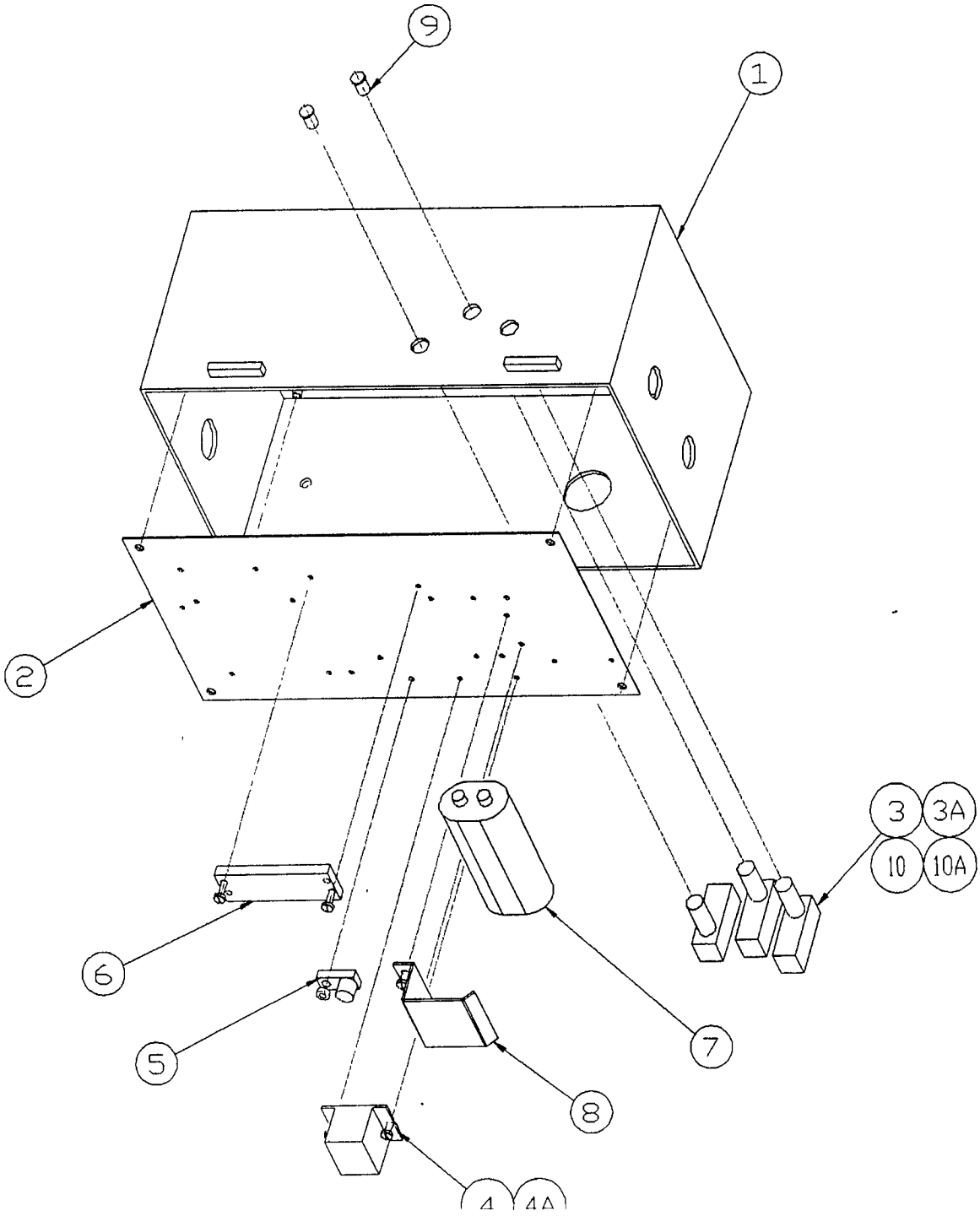


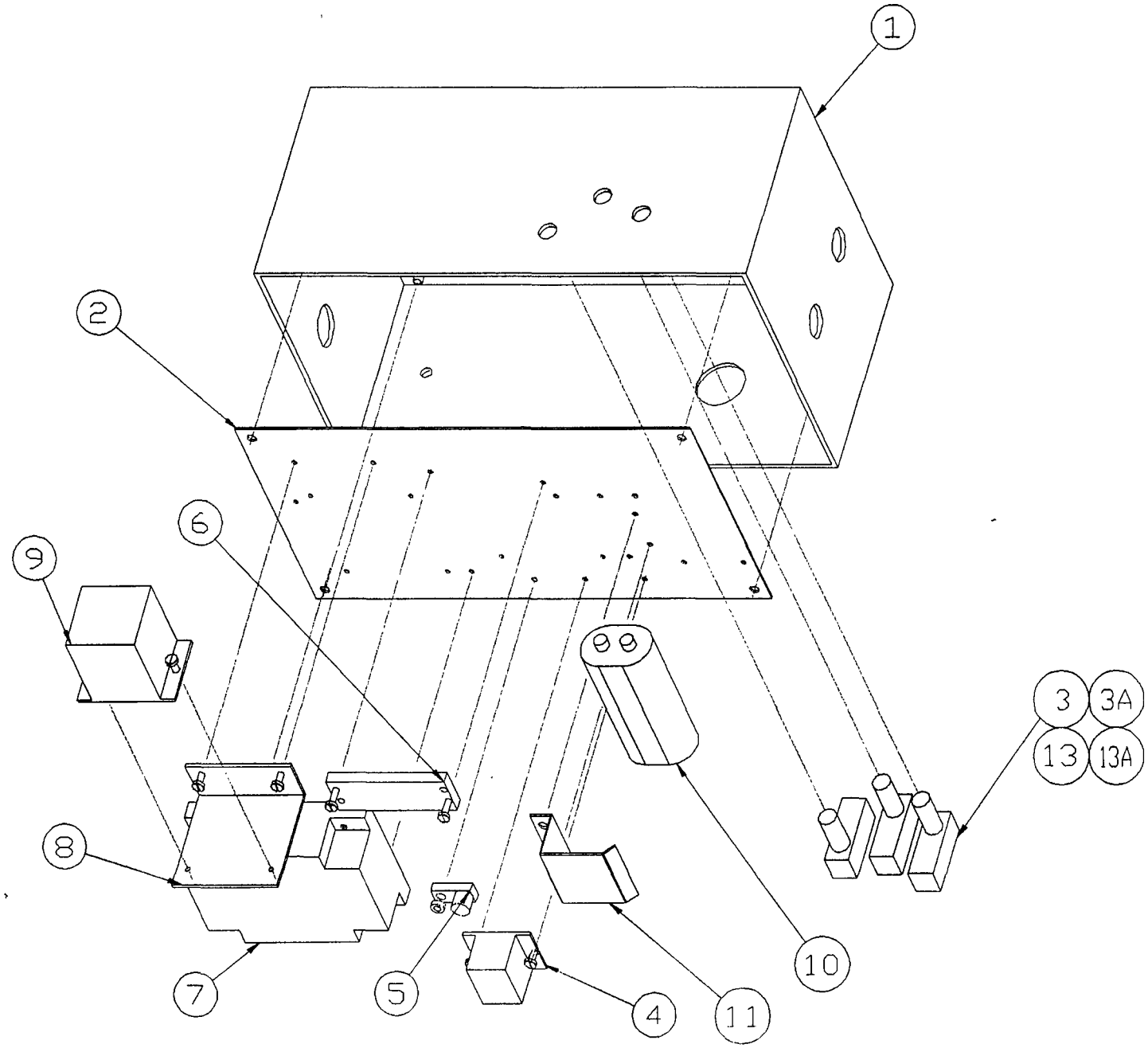
TABLE 5.4
UNIVERSE SKILLET, CARBORUNDUM NEMA BOX ASSEMBLY

Parts List

ITEM	PART NO.	DESCRIPTION	QTY.
1	98-1336	NEMA BOX, LARGE	1
2	98-1265	MOUNTING PLATE, NEMA BOX	1
3	08-7901	MICROSWITCH, POWER TILT UNITS	3
3A	08-7901	MICROSWITCH, MANUAL TILT UNITS	1
4	10-5503	SECTION, TERMINAL BLOCK, BLACK	2*
4A	10-5070	END PIECE, TERMINAL BLOCK, BLACK	1
5	10-5220	ELECTRICAL GROUND	1
6	10-6005	TERMINAL STRIP	1
7	08-7110	IGNITION MODULE	1
8	98-1344	BRACKET MOUNTING, TRANSFORMER	1
9	08-6450	TRANSFORMER 24V	1
10	REF	CAPACITOR, COMES WITH MOTOR	1
11	91-9178	CAPACITOR BRACKET, POWER LIFT OPTION	1
12	08-7826	MICROSWITCH HOLE PLUG, MANUAL TILT UNITS	2
13	08-7846	BOOT, RUBBER, MICROSWITCH	1
13A	08-7846	BOOT, RUBBER, MICROSWITCH	2*

*0nly 208V and 240V units have 2 contactors; all others have 1.

FIG. 5.4
UNIVERSE SKILLET, CARBORUNDUM NEMA BOX ASSEMBLY



UniVerse Tilting Skillet™

MODELS: 30-STGL, 30-STGL-LX, 40-STGL, 40-STGL-LX, Open-Leg Gas UniVerse Skillet®
30-STGM, 30-STGM-LX, 40-STGM, 40-STGM-LX, Modular Gas UniVerse Skillet®

TABLE 6.1
TROUBLESHOOTING GUIDE

PROBLEM	PROBABLE CAUSE	REMEDY	PART NO.
1. UNEVEN HEATING.	a. Temperature control out of calibration or defective.	a. Calibrate or replace.	a. 08-6365
2. SIGNAL LIGHT OUT.	a. Burnt out bulb. b. Broken temperature control. c. Loose electrical connection.	a. Replace. b. Replace. c. Repair.	a. 10-5052 b. 08-6365
3. UNIT FAILS TO HEAT.	a. Circuit breaker is off. b. Malfunction of interlock switch. c. Broken ignition module d. Broken ignitor. e. Broken flame sensor.	a. Reset circuit breaker. b. Adjust or replace. c. Replace. d. Replace. e. Replace.	b. 09-6465 c.08-7110 d.10-8259 e. 08-6452, 10-4758
4. NO 110 VOLTS OUTPUT.	a. Defective temperature control. b. Broken temperature sensor.	Replace. b. Replace.	a. 08-6365 b. 08-6305
5. NO GAS TO UNIT.	a. Defective gas valve.	a. Replace.	a. 10-7686, 10-7683, 08-7108,09-1150, 09-1151

CALIBRATION OF TEMPERATURE CONTROL

1. Ensure that pan is empty and clean before calibrating.
2. Place a surface thermometer on left or right rear sides, 3 " from sides of griddle surface.

   NOTE: Check that magnets on thermometer extend through holes in circular base plate and are in complete contact with griddle surface.
3. Set temperature control knob at 375°F (191°C).
4. Allow skillet to preheat and stabilize 2-3 cycles.
5. Record thermometer reading. If a temperature of370°—380°F (188°-193°C) is recorded, procedure is complete. If not, go on to step 6.

6. Remove control box cover by removing screw in rear and right side of cover.

7. Locate temperature control circuit board (see Figure 6.1) and calibrate as follows:
   a. If temperature goes above 375°F (191°C), turn setpot labeled HI counterclockwise to decrease temperature.
   b. If temperature goes below 375°F (191°C), turn setpot labeled HI clockwise to increase temperature.

NOTE: Turn the HI setpot only. Be careful when turning setpot—just a slight turn (approximately 22°) will change temperature by 25°F.

8. Allow skillet to cycle three (3) times. This cycling allows temperature control to stabilize.

9. Record thermometer reading when pilot light goes out. If a temperature of 370°-380°F (188°-193°C) is recorded, calibration procedure is complete. If not, repeat steps 7 and 8 until appropriate temperature is recorded.

10. Replace control box cover by pushing down and replacing screw in rear and right side of cover.

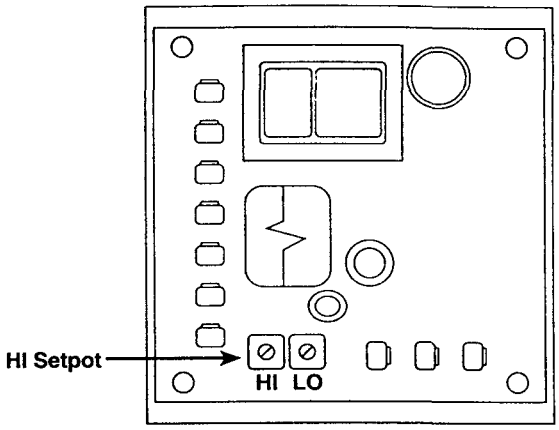


FIG. 6.1

TEMPERATURE CONTROL CIRCUIT BOARD

REPLACEMENT OF TEMPERATURE CONTROL

1. Place circuit breaker in OFF position.
2. Remove skirted dial knob by pulling it off the control box cover.
3. Remove control box cover by removing screw in rear and right side of cover.
4. Disconnect all wire leads from temperature control.

NOTE: Leads should be marked appropriately to facilitate re-installation.

5. Remove temperature control by removing two (2) pan head nuts from side of control box.
6. Install new temperature control and reverse steps 1-5.

ADJUSTMENT OF INTERLOCK SWITCH

1. Tilt skillet pan all the way in the downright position.

NOTE: If adjusting the interlock switches for the tilt mechanism in a power tilt unit, the pan will have to be all the way in the upright position to adjust one of the switches.

2. Place circuit breaker in OFF position.
3. Open the nema box by loosening the two screws at the top of the nema box.
4. Loosen the bottom nut of the switch until it contacts with the cam and depresses the plunger on the switch.
5. Tighten the top nut on the switch to keep the switch in the desired location.
6. Close and fasten the nema box by tightening the 2 screw:
   at the top of the box.
7. Place circuit breaker in ON position.

CLEANING AND PREVENTIVE MAINTENANCE

1. The skillet should be cleaned daily.
2. Wash the skillet with a mild detergent and hot water. If food is stuck to the surface of the skillet pan, soak it and use a little heat to loosen the food. Then, wash with clear water and dry.
3. Be sure to wash under the skillet cover and rinse with clear water.
4. Check the skillet pouring lip corners to be sure they are clean. Also, wash around the exterior of the skillet. Rinse with clear water and air dry.

SECTION 7
OPTIONS PARTS LISTS

UniVerse Tilting Skillet™

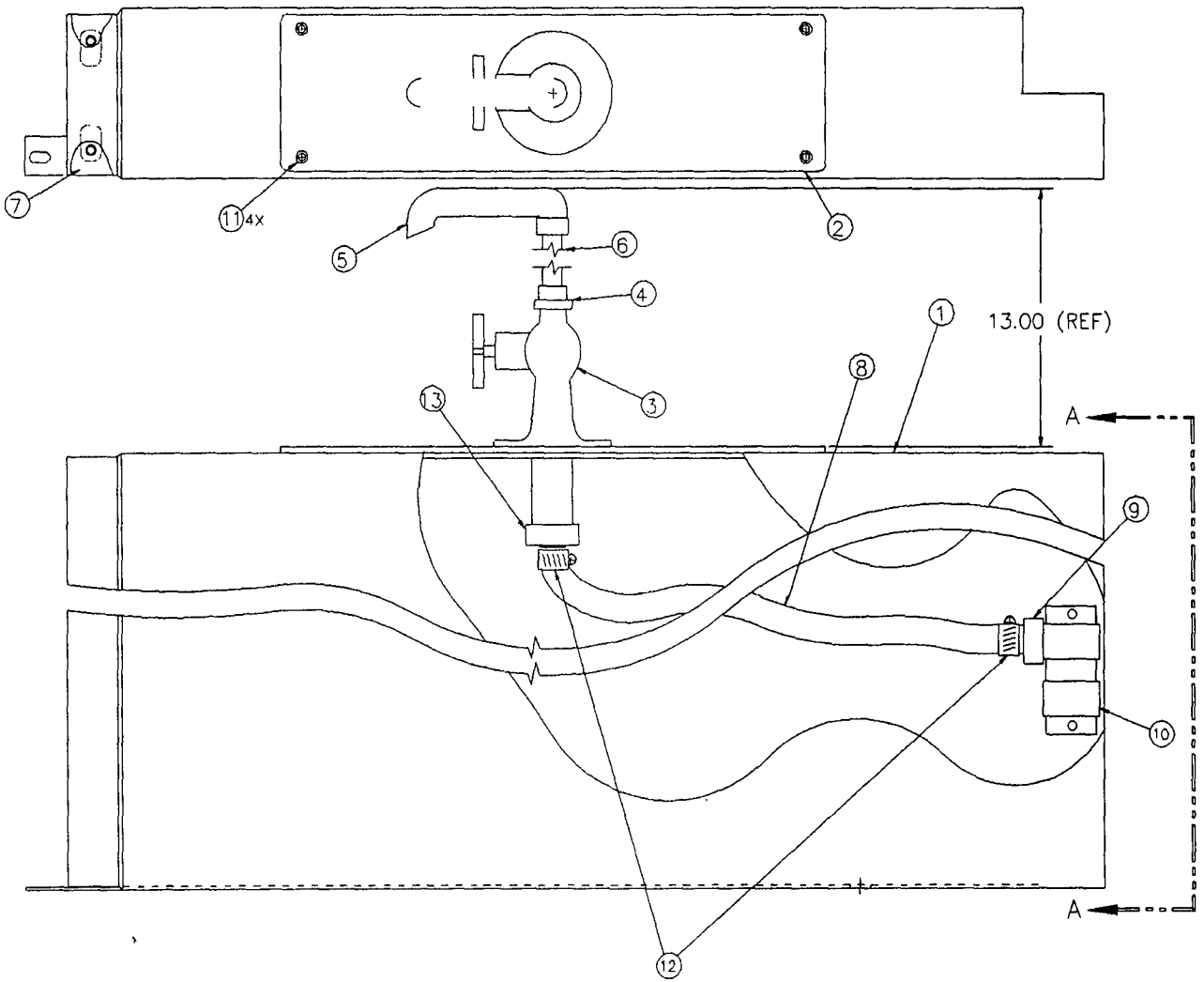
MODELS: 30-STGL, 30-STGL-LX, 40-STGL, 40-STGL-LX, Open-Leg Gas UniVerse Skillet
30-STGM, 30-STGM-LX, 40-STGM, 40-STGM-LX, Modular Gas UniVerse Skillet

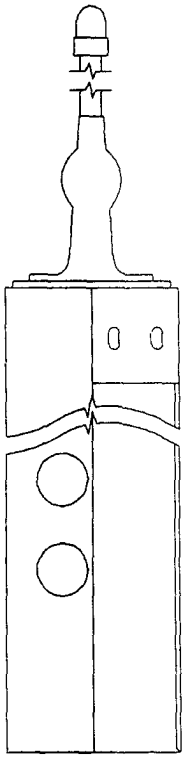
TABLE 7.1
UNIVERSE SKILLET OPTIONS, SINGLE PANTRY FAUCET

Parts List

ITEM	PART NO.	DESCRIPTION	QTY.
1	98-1199	CONTROL BOX REAR, PANTRY FAUCET	1
2	98-1360	MOUNTING PLATE, SINGLE PANTRY FAUCET	1
3	98-1366	SINGLE PANTRY FAUCET	1
4	98-1368	ADAPTER, SINGLE PANTRY FAUCET	2
5	10-5753	SPRAY NOZZLE WITH SWIVEL NOZZLE	1
6	10-3767	NIPPLE, FILL FAUCET RISER, 6"	1
7	REF	#8-32 WELDNUT	8
8	98-1475	TUBING, BRAIDED TEFLON	1
9	98-1477	COUPLER, BRASS HOSE BARB, 3/8 ID TO 3/8 PIPE	1
10	98-0877	ASSY, WATER LINE INLET	1
11	10-1761	#8-32 SCREW, 3/8 LG, S.S	1
12	08-1206	HOSE CLAMP	2
13	98-1479	COUPLER, BRASS HOSE BARB, 3/8 I.D X 1/2" THD FEMALE	1

FIG. 7.1
UNIVERSE SKILLET OPTIONS, SINGLE PANTRY FAUCET





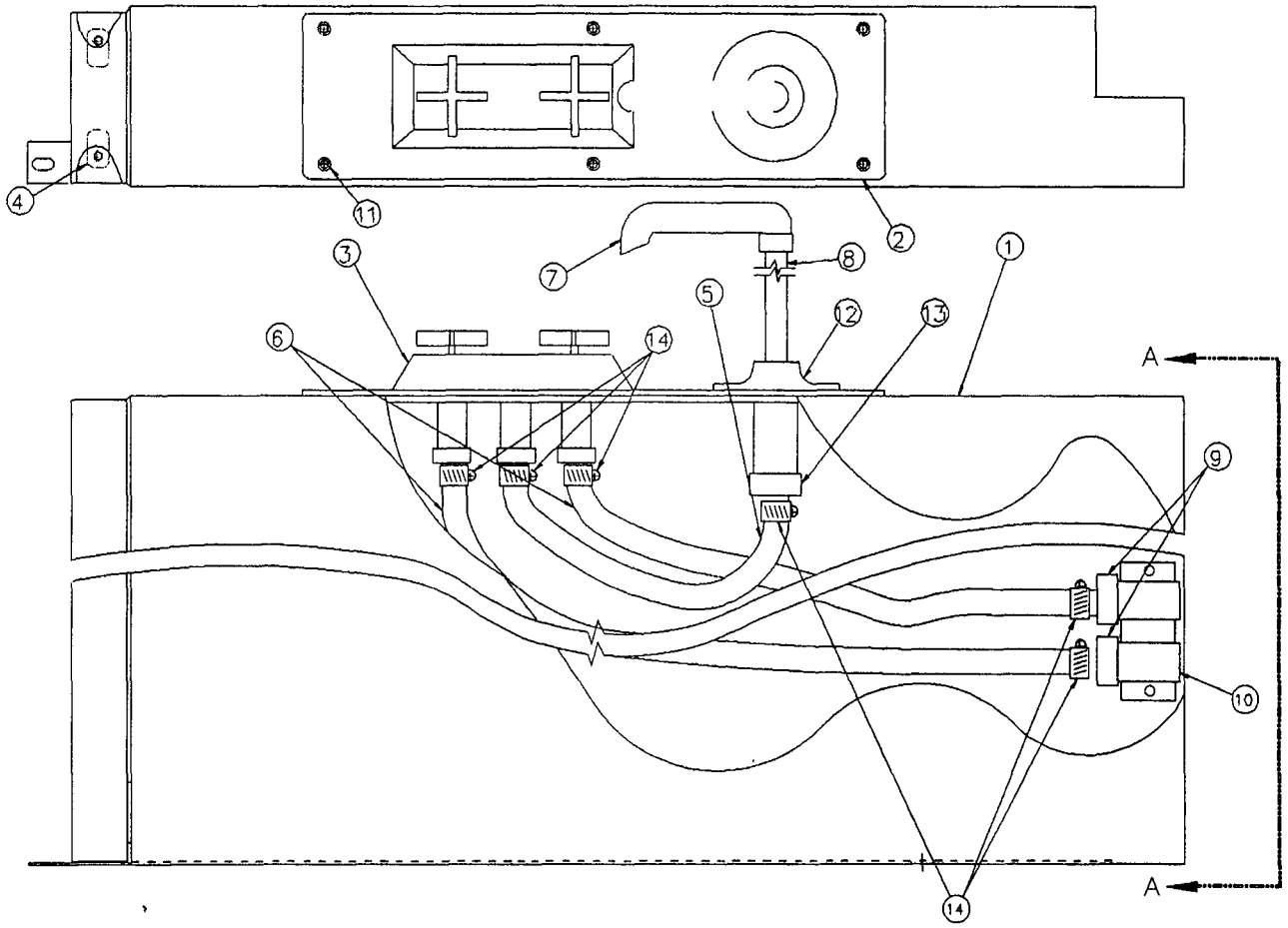
DETAIL A–A
BACK VIEW

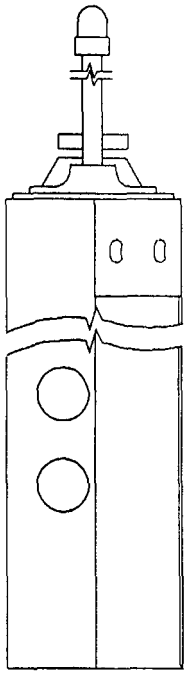
TABLE 7.2
UNIVERSE SKILLET OPTIONS, DOUBLE PANTRY FAUCET

Parts List

ITEM	PART NO.	DESCRIPTION	QTY.
1	98-1199	CONTROL BOX REAR, PANTRY FAUCET	1
2	98-1362	MOUNTING PLATE, DOUBLE PANTRY FAUCET	1
3	98-1367	DOUBLE PANTRY FAUCET	1
4	REF	#8-32 WELDNUT, S.S	8
5	98-1475	TUBING, BRAIDED TEFLON, 3/8 ID X 5/8 OD X 10.5 LONG	1
6	98-1474	TUBING, BRAIDED TEFLON, 3/8 ID X 5/8 OD X 15 LONG	2
7	10-5753	SPRAY NOZZLE WITH SWIVEL BODY	1
8	10-3767	NIPPLE, FILL FAUCET RISER 6" LG	1
9	98-1477	COUPLER, BRASS HOSE BARB, 3/8 ID X MALE PIPE 3/8	5
10	98-0877	ASSY, WATER LINE INLET	1
11	10-1761	#8-32 SCREW, S.S., 3/8 LG	6
12	10-3108	REMOTE VALVE	1
13	98-1479	COUPLER, BRASS HOSE BARB, 3/8 ID TO 1/2 F. THD	1
14	08-1206	HOSE CLAMP	6

FIG. 7.2
UNIVERSE SKILLET OPTIONS, DOUBLE PANTRY FAUCET





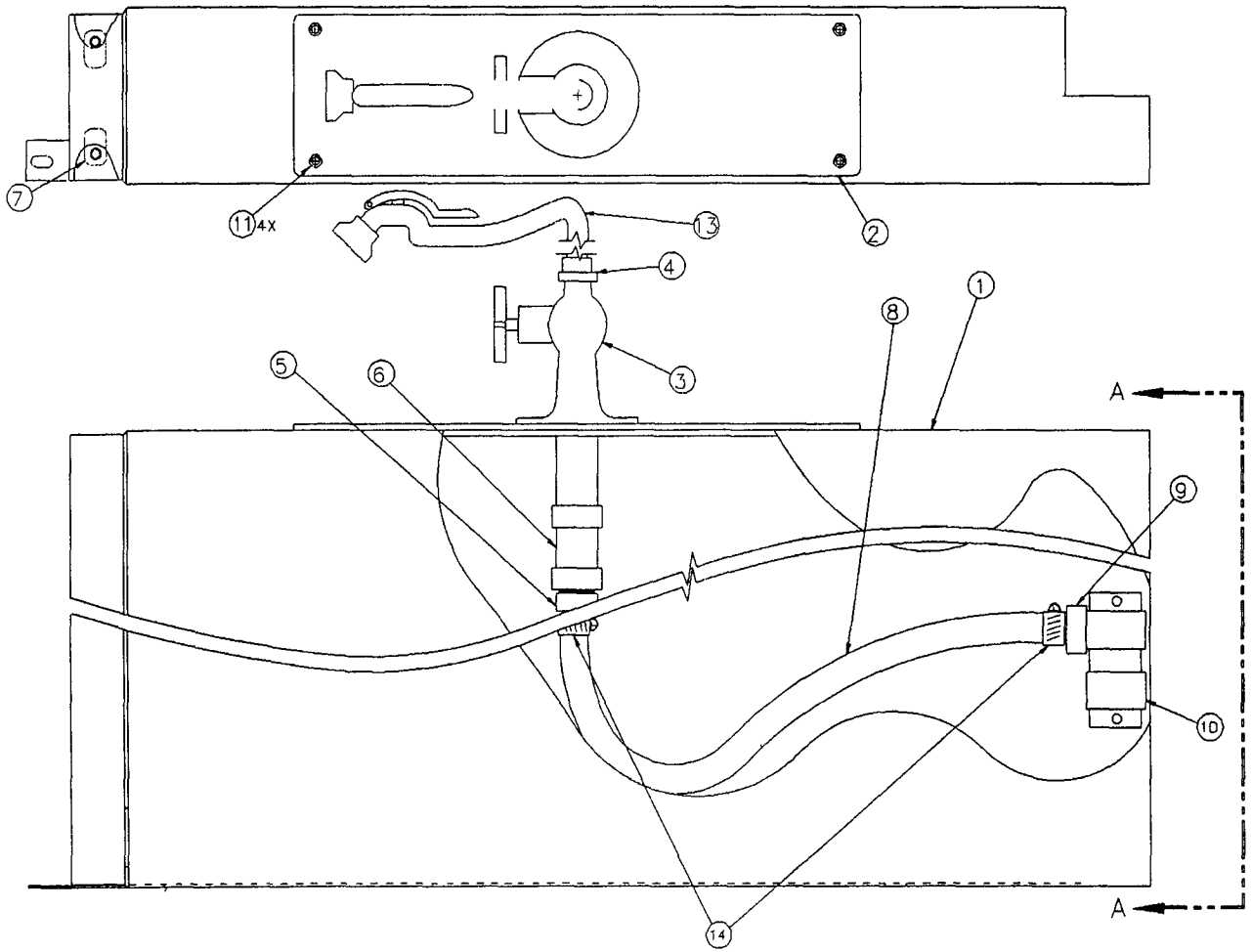
DETAIL A–A
BACK VIEW

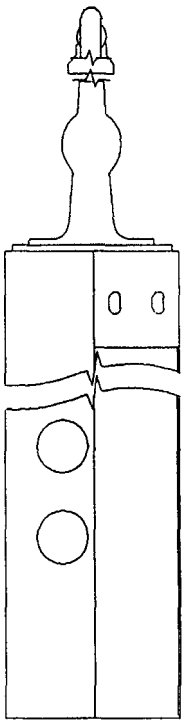
TABLE 7.3
UNIVERSE SKILLET OPTIONS, SINGLE SPRAY HOSE

Parts List

ITEM	PART NO.	DESCRIPTION	QTY.
1	98-1199	CONTROL BOX REAR, PANTRY FAUCET	1
2	98-1360	MOUNTING PLATE, SINGLE PANTRY FAUCET	1
3	98-1366	SINGLE PANTRY FAUCET	1
4	98-1368	ADAPTOR, SINGLE PANTRY FAUCET	2
5	98-1477	COUPLER, BRASS HOSE BARB, 3/8 ID TO 3/8 THD MALE	1
6	98-1401	CHECK VALVE, 1/2 X 1/2 IPS	1
7	REF	#8-32 WELDNUT, S.S,	6
8	98-1475	TUBING, BRAIDED TEFLON 3/8" X 5/80.D X 10.5 LG	1
9	08-4892	COUPLER, BRASS HOSE BARB, 3/8 ID XTO MALE 1/2 PIPE	2
10	98-0877	WATER LINE INLET, ASSY	1
11	10-1761	#8-32 SCREW , 3/8 LG S.S.	4
12	10-0959	SPRAY HOSE ASSY.	1
13	08-1206	HOSE CLAMP	2

FIG. 7.3
UNIVERSE SKILLET OPTIONS, SINGLE SPRAY HOSE



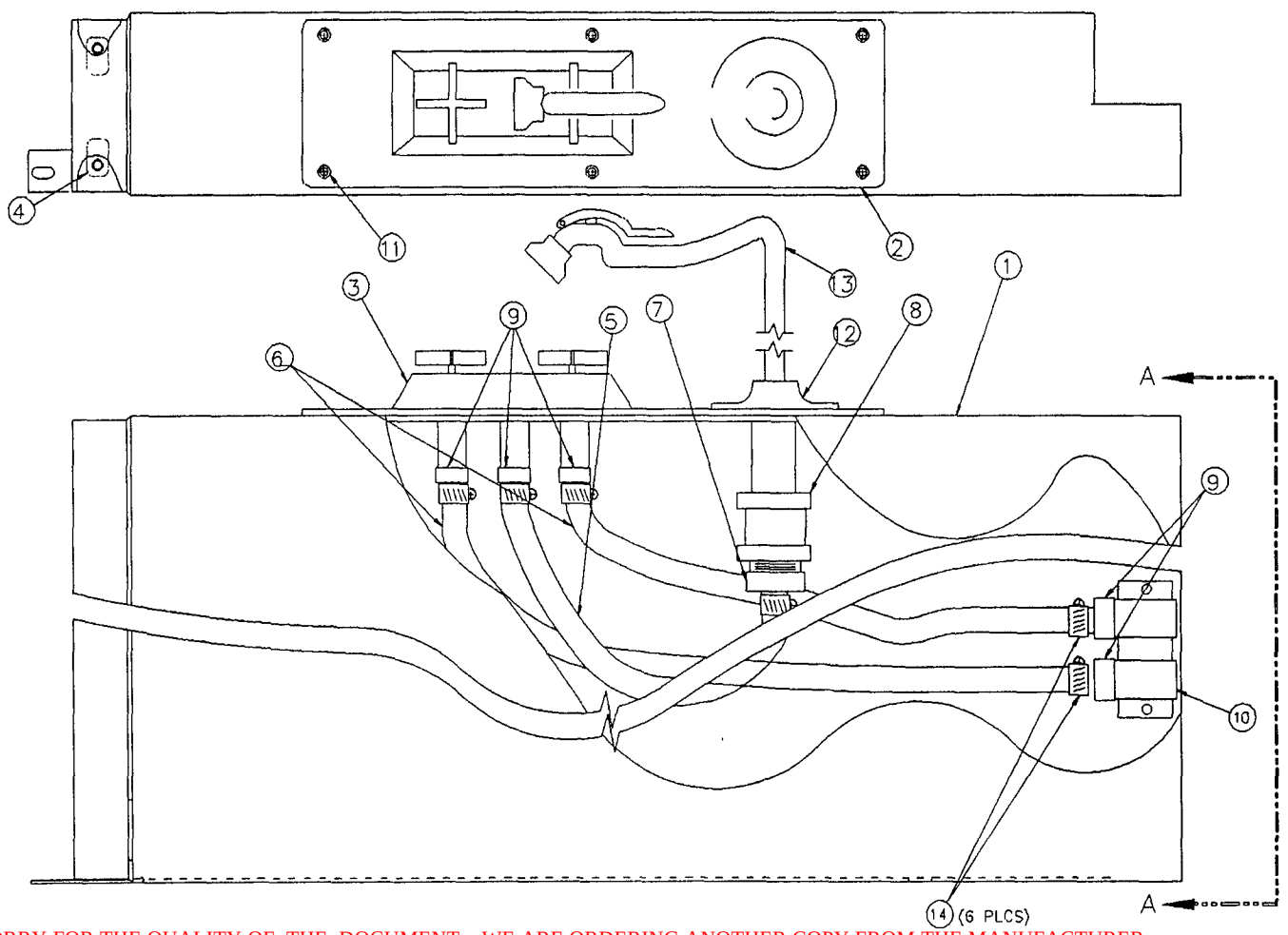


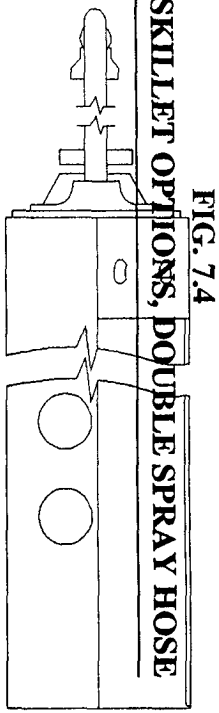
DETAIL A-A
BACK VIEW

TABLE 7.4
UNIVERSE SKILLET OPTIONS, DOUBLE SPRAY HOSE

Parts List

ITEM	PART NO.	DESCRIPTION	QTY.
1	98-1199	CONTROL BOX REAR, PANTRY FAUCET	1
2	98-1362	MOUNTING PLATE, DOUBLE PANTRY FAUCET	1
3	98-1367	DOUBLE PANTRY FAUCET	1
4	REF	#8-32 WELDNUT, S.S.	8
5	98-1475	TUBING, BRAIDED TEFLON, 3/8 ID X 5/8 OD X 10.5 LONG	1
6	98-1474	TUBING, BRAIDED TEFLON, 3/8 ID X 5/8 OD X 15 LONG	2
7	08-4892	COUPLER, BRASS HOSE BARB, 3/8 ID TO 1/2 THD MALE	1
8	98-1401	CHECK VALVE	1
9	98-1477	COUPLER, BRASS HOSE BARB, 3/8 ID X MALE PIPE 3/8	5
10	98-0877	WATER LINE INLET ASSY.	1
11	10-1761	#8-32 SCREW, S.S 3/8" LG	1
12	10-3108	REMOTE VALVE	1
13	98-0959	SPRAY HOSE ASSY.	1
14	08-1206	HOSE CLAMP	6





DETAIL A–A
BACK VIEW

FIG. 7.4
UNIVERSE SKILLET OPTIONS, DOUBLE SPRAY HOSE

SORRY FOR THE QUALITY OF THE DOCUMENT.. WE ARE ORDERING ANOTHER COPY FROM THE MANUFACTURER.

TABLE 7.5
UNIVERSE SKILLET OPTIONS, PAN SUPPORT

Parts List

ITEM	PART NO.	DESCRIPTION	QTY.
1	98-1186	PAN SUPPORT WELD ASSEMBLY	1
2	08-7838	JAM NUT, 1/4-20	6
3	98-1378	PIVOT ARM	2
4	98-1188	FRAME BRACKET	1
5	10-1814	BOLT, 1/4-20 X 3/4 STAINLESS	4
6	98-1416	PIVOT STUD	4
7	08-7837	BELLVILLE SPRING WASHER, STAINLESS STEEL	4
8	98-1417	LOWER ARM	1
9	98-1419	UPPER ARM	1
10	98-1415	GUARD	1
11	10-1788	SCREW, 10-32 X 3/8 LONG	1

FIG. 7.5

UNIVERSE SKILLET OPTIONS, PAN SUPPORT

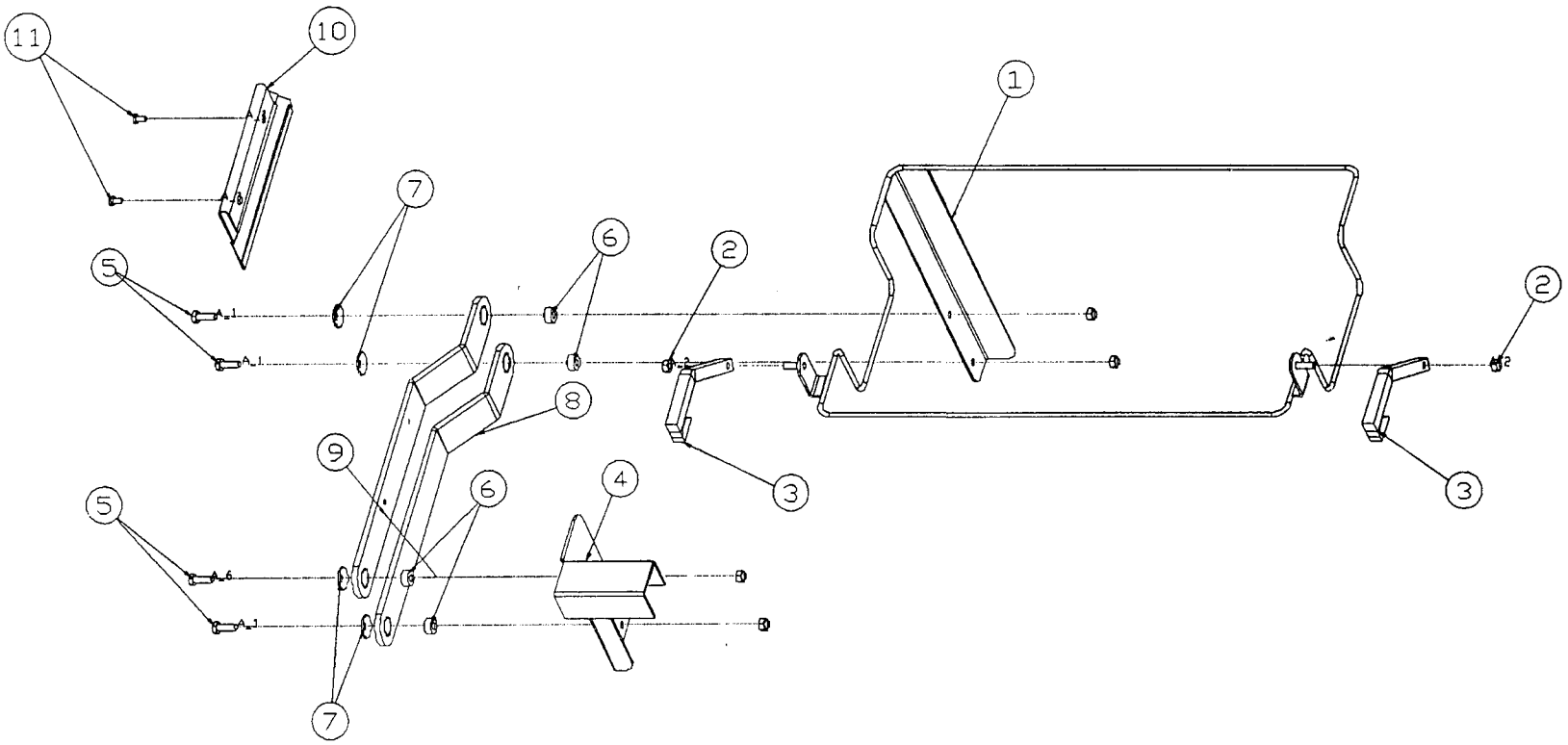


TABLE 7.6
UNIVERSE SKILLET OPTIONS, CASTERS WITH GAS STRAIN RELIEF

Parts List

ITEM	PART NO.	DESCRIPTION	QTY.
1	98-1421	GAS STRAIN RELIEF KIT FOR CASTER UNITS	1
2	98-1523	CASTER WITH BRAKE	2
3	98-1191	CASTER WITHOUT BRAKE	2
4	08-7839	EYE-BOLT, 1/4-20 X 2.00" LG	1
5	S-4839	INSTALLATION INSTRUCTIONS	1

FIG. 7.6
SEE INSTALLATION INSTRUCTIONS S-4839

TABLE 7.7
UNIVERSE SKILLET OPTIONS, CASTERS WITH GAS STRAIN RELIEF

Parts List

ITEM	PART NO.	DESCRIPTION	QTY.
1	98-1523	CASTER WITH BRAKE	2
2	98-1191	CASTER WITHOUT BRAKE	2
3	S-4839	INSTALLATION INSTRUCTIONS	1

FIG. 7.7
SEE INSTALLATION INSTRUCTIONS S-4839

TABLE 7.8
UNIVERSE SKILLET OPTIONS, CASTERS WITH GAS STRAIN RELIEF

ITEM	PART NO.	DESCRIPTION	QTY.
1	98-1421	GAS STRAIN RELIEF KIT FOR CASTER UNITS	1

FIG. 7.8

SEE INSTALLATION INSTRUCTIONS S-4839

INSTALLATION INSTRUCTIONS FOR CASTERS ON THE UNIVERSE SKILLET

WARNING: Before raising skillet base make sure the pan is in the down position for steps 1-8.

1. Raise the front of the skillet base and brace with front of skillet off the ground.
2. Insert casters with brakes into the front legs of the frame

   NOTE: Casters must screw fully into the frame of the skillet in order for them to be able to be tightened.

3. Tighten the nut at the base of the casters until casters are securely fastened into the legs of the frame.
4. Put the universe skillet down on the floor.
5. Apply the brakes in the front by stepping on the lever on the side of the front casters until it is in the on position.
6. Raise the rear of the skillet base and brace with rear of skillet off the ground.
7. Insert casters without brakes into the rear legs of the frame

   NOTE: Casters must screw fully into the frame of the skillet in order for them to be able to be tightened.

8. Tighten the nut at the base of the casters until casters are securely fastened into the legs of the frame.
9. Put the Universe Skillet down on the floor.

   NOTE: For units with Gas Strain Relief Kit (MF# 98-1421) refer to # 10.

10. Refer to the Installation Instruction provided with the Gas Strain Relief Kit (MF #98-1421) for recommended mounting instructions for the complete Gas Strain Relief Quick-Disconnect kit. NOTE: See figure for recommended location of l-bolt. (MF #08-7839)

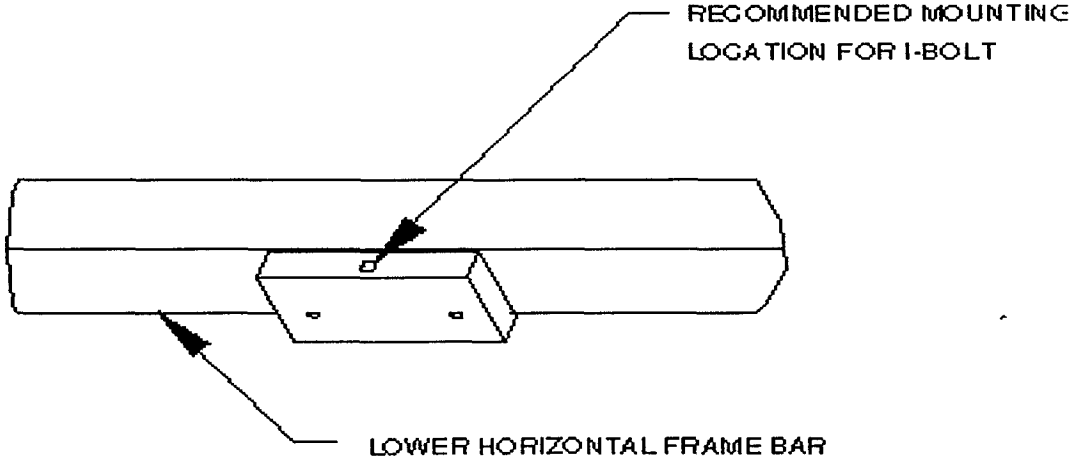


TABLE 7.9
UNIVERSE SKILLET OPTIONS, MODULAR

Parts List

ITEM	PART NO.	DESCRIPTION	QTY.
1	98-1434	ASSY, MODULAR PANEL, LEFT SIDE	1
2	98-1498	WELD ASSY, COVER, LEFT SIDE	1
3	98-1431	ASSY, MODULAR PANEL, FRONT, 30-GAL	1
4	98-1432	ASSY, MODULAR PANEL, FRONT, 40-GAL	1
5	98-1524	PANEL, REAR MODULAR, 30-GAL	1
6	98-1525	PANEL, REAR MODULAR, 40-GAL	1
7	98-1469	COVER, MODULAR FRAME, FRONT HORIZONTAL, 30-GAL	1
8	98-1468	COVER, MODULAR FRAME, FRONT HORIZONTAL, 40-GAL	1

FIG. 7.9 UNIVERSE SKILLET OPTIONS, MODULAR INSTRUCTIONS

1. After receiving Universe Skillet and uncrating unit, make sure all components needed for modularity have been shipped with the unit. (See below for needed components for 30 -Gal or 40-Gal unit)
2. Position Modular Support Bar (Item 1, 30-Gal,, Item 2,40-Gal) by locating holes on Support Bar in line with mounting holes on the bottom of front legs. Secure in place by screwing adjustable legs (Item 4) and Washer (Item 3) into holes on bottom of front legs. Tighten securely. (See Fig 1.1)

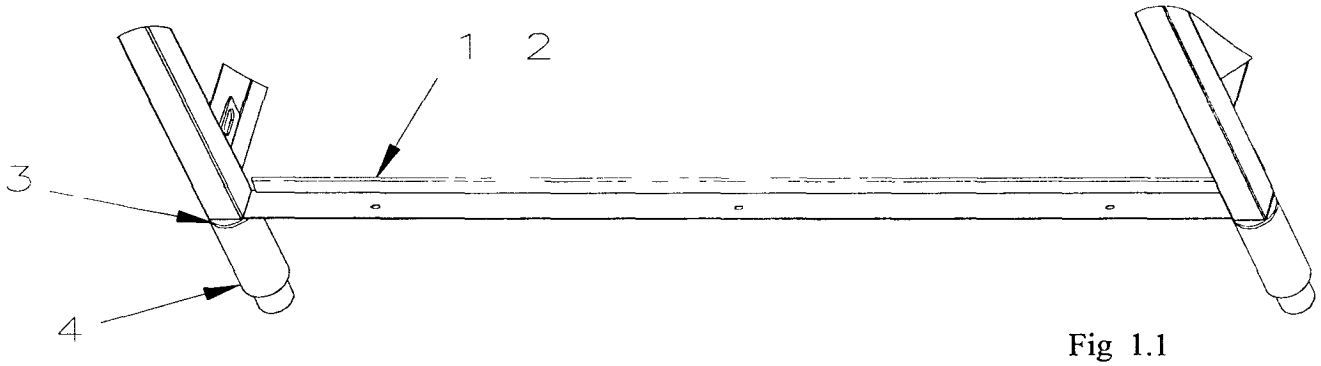


Fig 1.1

ITEM#	MF PART NO.	DESCRIPTION	QTY
1.	98-1435	MODULAR SUPPORT BAR, 30-GAL	1
2.	98-1436	MODULAR SUPPORT BAR, 40-GAL	1
3.	08-7836	WASHER, S.S 1.63" OD X.56 ID	2
4.	98-1521	LEG, ADJUSTABLE, 1.63" O.D, S.S	2

3. Mount Flanged Adjustable Feet (Item 1) and Washer (Item 2) on bottom of rear legs. Tighten securely.

(See Fig 1.2)

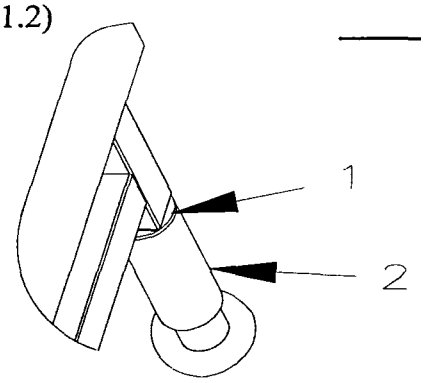
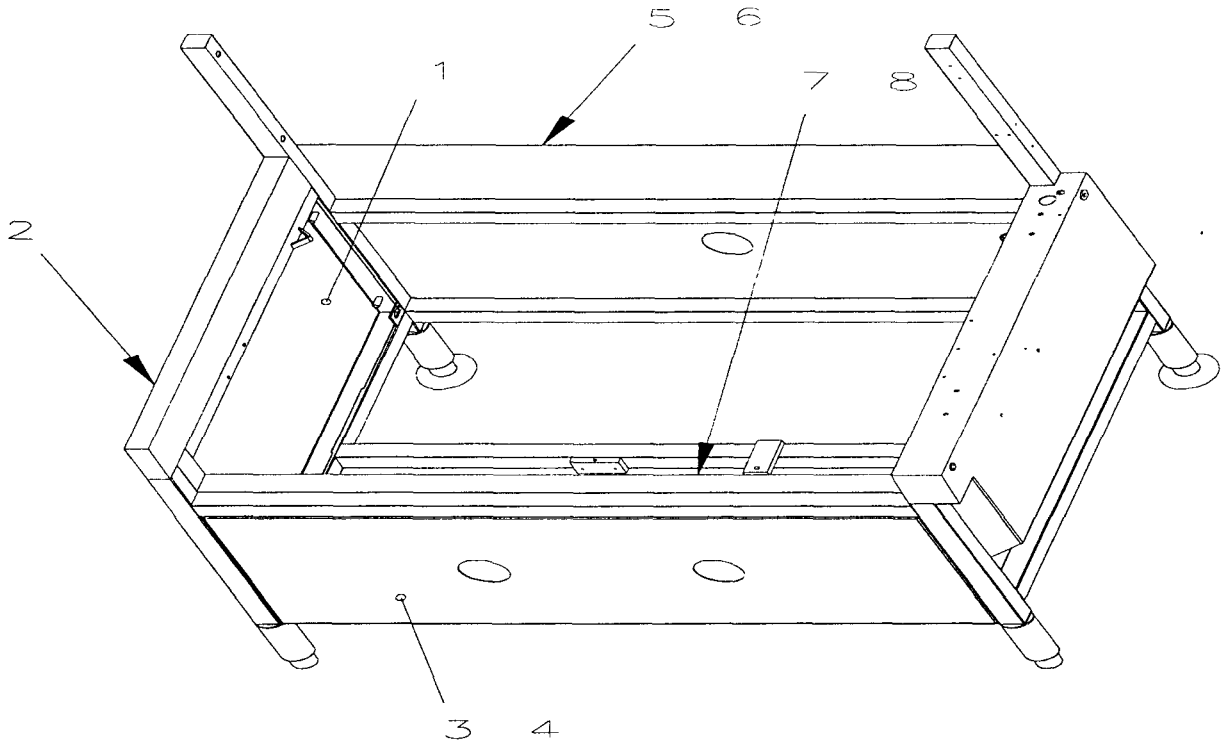


Fig 1.2

FIG. 7.9 UNIVERSE SKILLET OPTIONS, MODULAR INSTRUCTIONS CON'T

4. Mount Modular Panel Assembly, Left Side (Item 1) by pushing panel into mounting holes located on left side vertical frame supports. Ball plungers should line up with mounting holes, and allow easy on/off access. (See Fig 1.3)
5. Mount Modular Panel Assembly, Front (Item 3 (30-Gal), Item 4 (40-Gal)) by pushing panel into mounting holes located on front vertical frame supports. Ball plungers should line up with mounting holes, and allow easy on/off access. (See Fig 1.3) OPTIONAL : MODULAR LINE ACCESORIES
6. Mount Cover Assy (Item 2) with Trim Kit Market Forge Part No . 98-1517
7. Mount Rear Modular Panel (Item 5 (30-Gal), Item 6 (40-Gal)) with 6 #10-32 Machine Screws to tapped holes on rear vertical frame support bars.



ITEM#	MF P/N	DESCRIPTION	QTY
1	98-1434	Assy, Modular Panel, Left side	1
2	98-1498	Weld Assy, Cover, Left side	1
3	98-1431	Assy, Modular Panel, Front, 30-Gal	1
4	98-1432	Assy, Modular Panel, Front, 40-Gal	1
5	98-1524	Panel, Rear Modular, 30-Gal	1
6	98-1525	Panel, Rear Modular, 40-Gal	1
7	98-1469	Cover, Modular Frame, Front Horiz. 30-Gal	1 (Factory Installed)
8	98-1468	Cover, Modular Frame, Front Horiz. 40-Gal	1 (Factory Installed)

TABLE 7.10
UNIVERSE SKILLET OPTIONS, TRIM JOINING KIT

Parts List

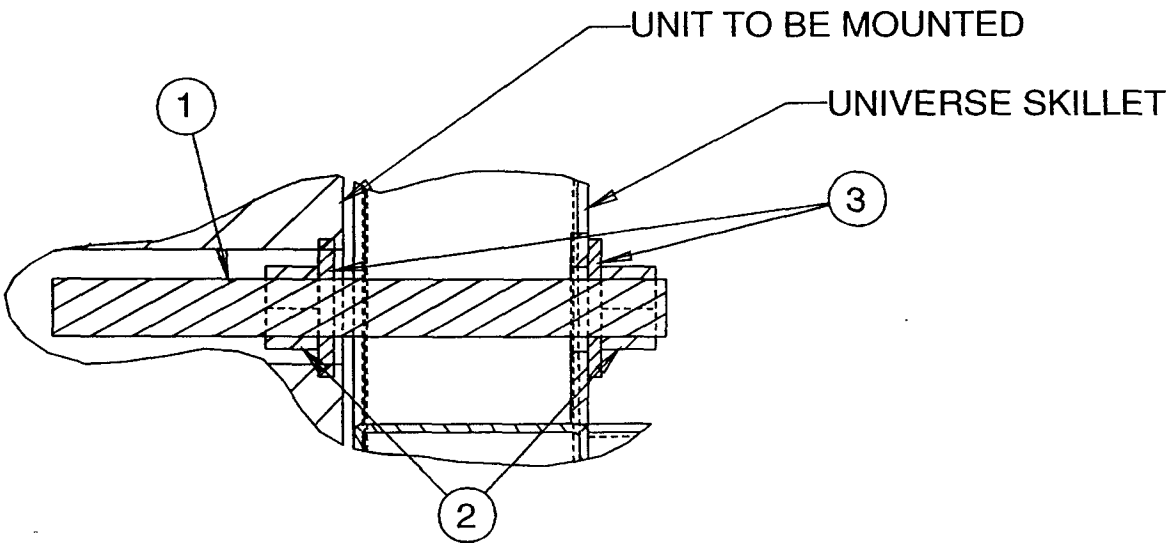
ITEM	PART NO.	DESCRIPTION	QTY.
1	98-0969	3/8-16 THREADED ROD X 3.875" LG	8
2	10-2317	3/8-16, HEX NUT, S.S.	26
3	10-2405	5/16 WASHER, S.S.	26
4	98-1190	L-STRIP, MODULAR, UNI. SKILLET	1
5	98-1518	T-STRIP, MODULAR, UNI. SKILLET	1
6	S-2417	INSTALLATION INSTRUCTIONS, MODULAR KIT	1
7	98-1464	SPACER	1
8	98-1498	WELD ASY, COVER, LEFT SIDE	1

FIG. 7.10

UNIVERSE SKILLET OPTIONS, INSTRUCTIONS TRIM JOINING KIT

5. Thread Item 1 (Refer to Drawing 98-1517 3/8-16 Threaded Bolt thru Riv-nut on the lower left side of the skillet so that there is enough room to secure Washer (Item 3)and Nut (Item 2) on the inside of the skillet. Refer to figure 1.2. Secure Threaded Bolt (Item 1)into place using Washer (Item 3) and Nut (Item 2) hand tighten washer and nut into place. **Repeat this procedure for all upper mounting holes.** (4 places)
6. Use additional Washers (Item 2) and Nuts (Item 3) provided with kit to adjust and use as spacers where needed during assembly.
7. If feasible at this time align skillet with adjoining unit. Threaded Bolt (Item 1) should slide thru mounting location provided on al lGF Market Forge modular assembly frames. Attach using Washers (Item 3) and Nuts (Item 2) to inside of adjoining unit. Hand tighten washer and nut into place. **Repeat this procedure for all lower mounting holes.** (4 places) (See Fig 1.2)

Figure 1.2



CROSS SECTION OF MOUNTING LOCATION

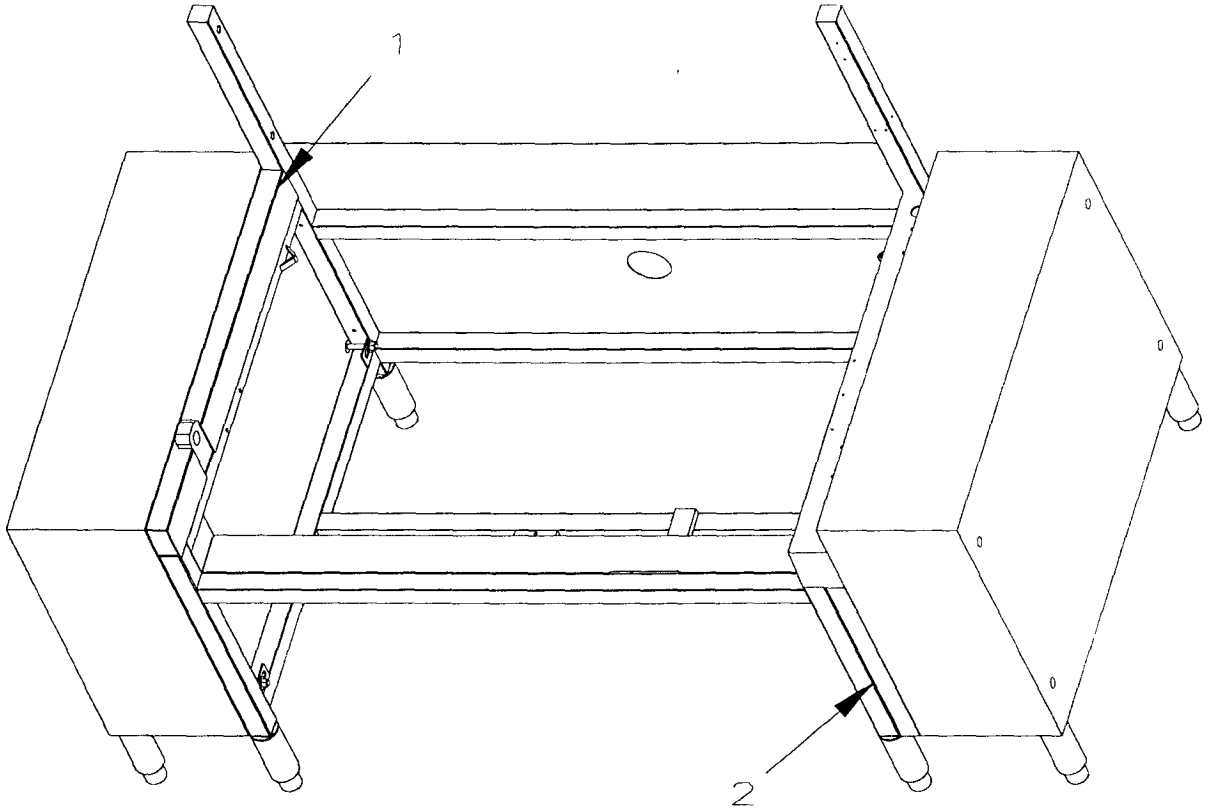
ITEM#	MF PART NO.	DESCRIPTION	QTY
1.	98-0969	3/8-16 THREADED ROD	4
2.	10-2317	3/8-16 HEX NUT	13
3.	10-2401	3/8 WASHER, S.S	13

8. After all eight Threaded Rods (Item 1) have been hand tightened, reinstall all modular frame enhancements provided with the Universe Skillet.
9. Tighten and secure all nuts.
10. Refer to Installation & Operating Instructions before using unit.

FIG. 7.10

UNIVERSE SKILLET OPTIONS, INSTRUCTIONS TRIM JOINING KIT CON'T

9. Mount Frame Cover (Item # 1) to left side of frame positioning slots over 3/8-16 Threaded Rod. Do Not tighten threaded rod at this time. (See Fig 1.3)
10. Mount Spacer, Modular Frame (Item #2) by securing to adjoining unit with #10-32 Self Tapping Screw or Nut and bolt as required. Mounting holes are found on adjoining frame base. Fits both left and right side opening doors. (See Fig 1.3)



11. Tighten and secure all nuts.
12. Refer to Installation & Operating Instructions before using unit.

TABLE 7.11
UNIVERSE SKILLET OPTIONS, SPRING SUPPORT FOR SPRAY HOSE

Parts List

ITEM	PART NO.	DESCRIPTION	QTY.
1	08-7903	SPRING, SPRAY HOSE, UNI SKILLET,(GOOSENECK)	1
2	08-7904	SPRING BODY, SPRAY HOSE, UNI. SKILLET, (ADAPTER)	1
3	08-7905	RISER 3", CHROME PLATED, 3/8 THD	1

FIG. 7.11
UNIVERSE SKILLET OPTIONS, SPRING SUPPORT FOR SPRAY HOSE

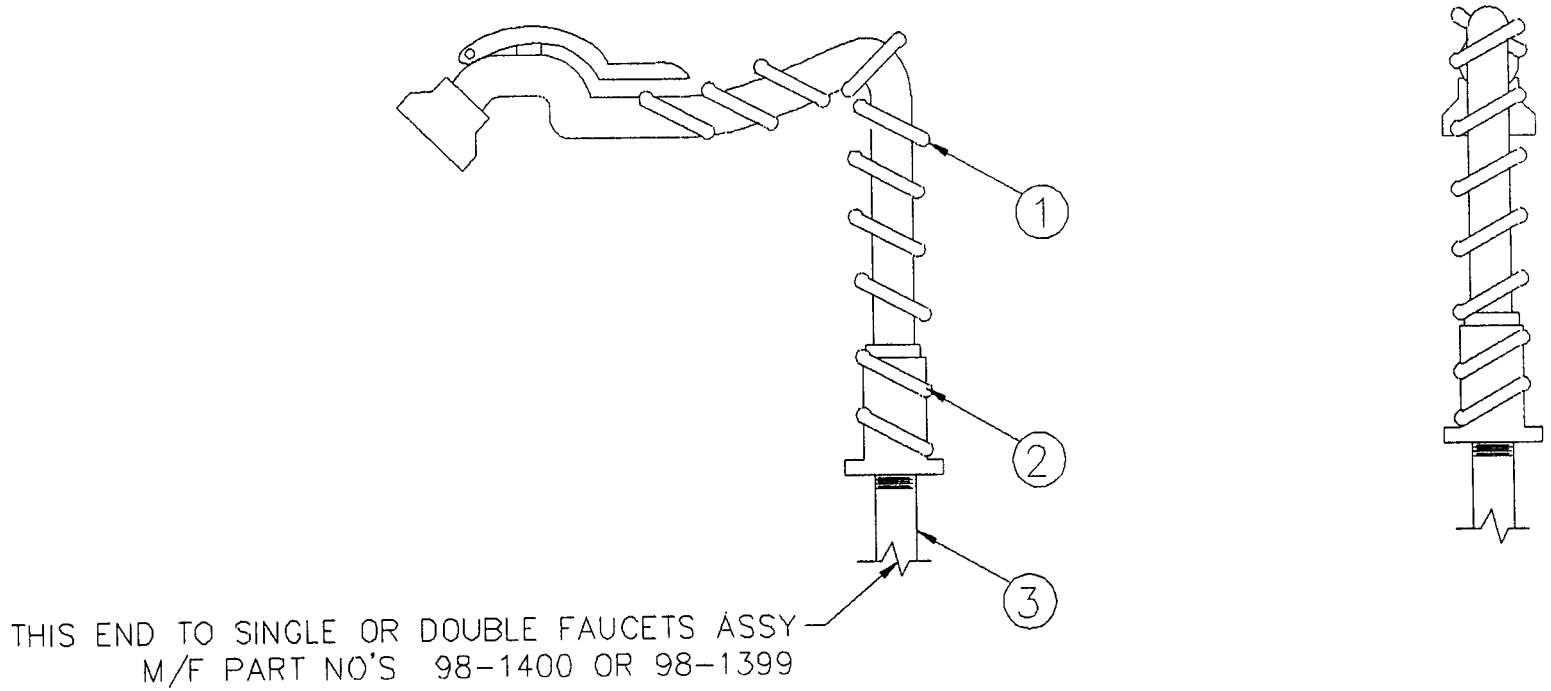
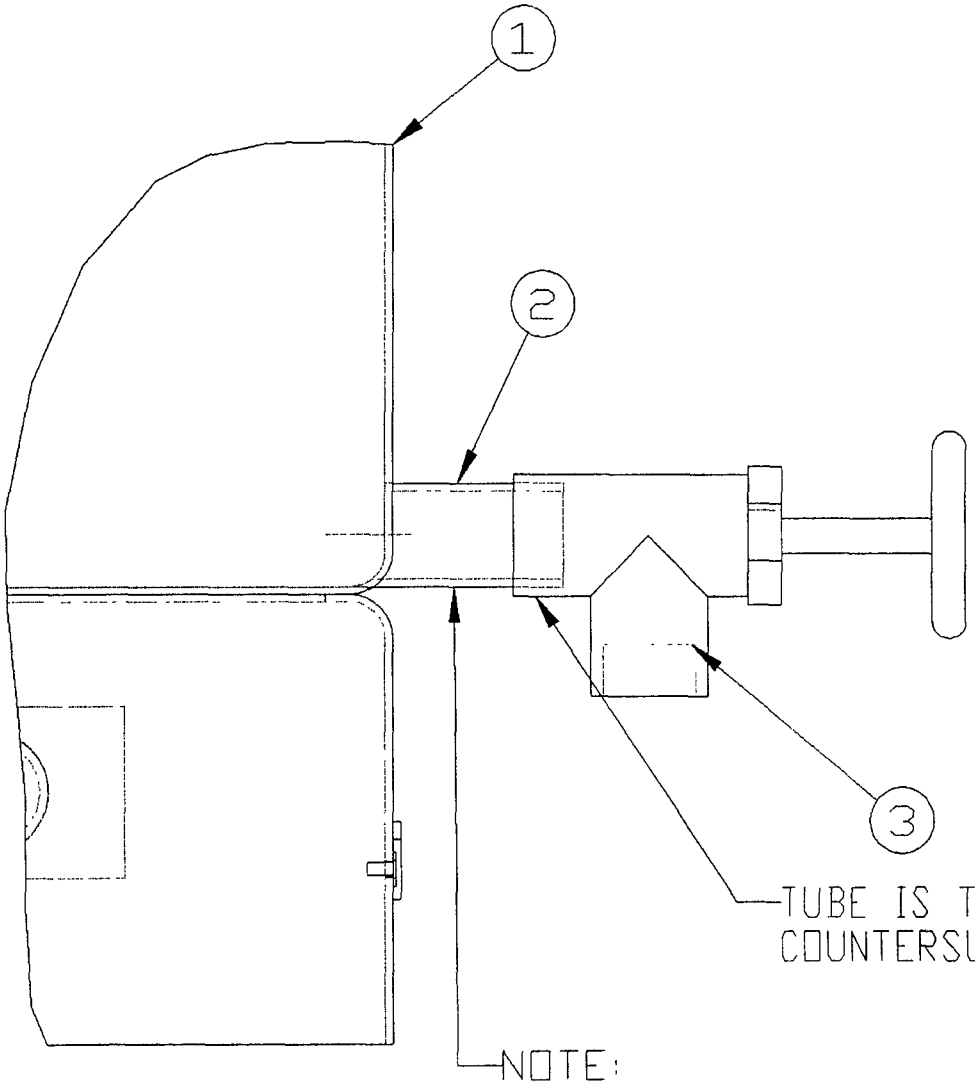


TABLE 7.12
UNIVERSE SKILLET OPTIONS, TANGENT DRAW-OFF

Parts List

ITEM	PART NO.	DESCRIPTION	QTY30-GAL	QTY 40-GAL
1	98-1231	PAN, 30- GAL, UNI. SKILLET	1	
2	98-1036	PAN, 40-GAL, UNI. SKILLET		1
3	98-1398	DRAW OFF TUBE	1	1
4	10-4928	DRAW OFF VALVE	1	1

FIG. 7.12
UNIVERSE SKILLET OPTIONS, TANGENT DRAW-OFF



NOTE:

1. DRAW OFF TUBE
   MUST BE PARALLEL
   WITH SKILLET BOTTOM
2. DRAW OFF TUBE IS NOT
   TO ENTER THE INSIDE OF PAN.